

January 29, 2016

Karen Edlin, Chief Pollution Prevention and Stewardship Unit DEQ, Office of Environmental Assistance P.O. Box 30457 Lansing, Michigan 48909-7957

RE: Final Report, DEQ Pollution Prevention Grants Program, Project #430233-13, Expanding Northern Michigan's Prescription and Over-the-Counter Drug Program

Dear Ms. Edlin:

It is my pleasure to submit to you the Final Report for the 2013 Michigan Department of Environmental Quality (MDEQ) Pollution Prevention Grant awarded to Tip of the Mitt Watershed Council.

Project Name: Expanding Northern Michigan's Prescription and Over-the-Counter Drug

Program

Project Number: 430233-13

Grantee Name: Tip of the Mitt Watershed Council

#### **Project Goals and Objectives**

The Tip of the Mitt Watershed Council was awarded grant funds to enhance Northern Michigan's Prescription and Over-the Counter Drug Drop-Off (POD) Program by conducting targeted education and outreach to reach key audiences and through development of a focused media campaign. The POD Program is a multicounty-wide medication drug take-back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan.

During the granting period, five project elements were completed: 1) Conduct Targeted Education and Outreach, 2) Conduct Extensive Media Campaign, 3) Conduct Data Collection Through Surveys, 4) Implement Community Collection Events and

Coordinate Disposal for POD Boxes, and 5) Grant Administration. All project elements were completed within budget. Specific details on each task are provided below.

Overall, we exceeded our expectations and the project was a grand success resulting in increased awareness, access, and use of the POD Program by Northern Michigan community members. Through this project, we have been able to reduce the quantity of pharmaceuticals and personal care products entering Michigan's surface, ground, and drinking waters, as well as support law enforcement's efforts to keep these drugs out of the hands of people who will sell them, abuse them, and commit crimes while under their influence.

#### 1) Conduct Targeted Education and Outreach

Perform targeted education and outreach in an effort to increase awareness by seniors, caregivers of the elderly, and families of the recently deceased We produced and distributed approximately 4,000 brochures to funeral homes, assisted living facilities and nursing homes, as well as palliative and end-of-life health providers, such as VitalCare, Northern Michigan's largest home healthcare provider, and Hospice. The intent was to encourage use of the POD program and provide a resource that can be used as part of their services. We originally intended to distribute the brochure at an educational meeting. However, due to low RSVP's, we chose to cancel the meeting and instead distribute the publications through a direct mailing to approximately 100 facilities throughout the four counties of Antrim, Charlevoix, Cheboygan, and Emmet. The objective was to increase the use of the POD Program by directly reaching and providing key information to those individuals most likely to have large quantities of medications to dispose of and who have a need for the community service. In the end, this method of distribution proved successful as the brochure is now being given to clients of these service providers throughout Northern Michigan. In addition, we have already been contacted to provide additional copies for use in Home Care and Hospice.

In addition to the direct mailing, hard copies of the brochures are available at the Watershed Council's office and an electronic version can be downloaded from our website, www.watershedcouncil.org.

Perform outreach to schools in our 4-county service area to raise local parent awareness and usage of the POD Program

According to data previously collected from POD collection events, young adults, age group 21-34, have the lowest participation rate. We developed and printed a second publication to address this low participation by focusing on parents of youth within our service area. Over 10,000 brochures were distributed to 47 schools within the counties of Antrim, Charlevoix, Cheboygan, and Emmet. The brochure was included in school takehome packets, such as Friday Folders, or provided at parent-teacher conferences. In addition to hard copies, electronic copies were sent out by various school systems to approximately 1,500 parents. The schools were extremely pleased to have the

information for parents and eager to assist in distribution. By partnering with the local schools, we were able to distribute educational materials on proper medication disposal to a large number of young families through an easy and cost-effective way.

As with the other brochure, hard copies are currently available at the Watershed Council's office and an electronic version can be downloaded from our website, www.watershedcouncil.org.

Develop a distinct POD Program website to promote the POD message

In addition to brochures, Watershed Council staff developed an extremely in-depth webpage on the POD Program, which can be accessed at <a href="www.pillsinthepod.com">www.pillsinthepod.com</a>. The purpose of this webpage is to provide comprehensive information on proper disposal of pharmaceuticals and personal care products as well as disposal locations, including collection events and permanent boxes. The webpage includes distinct pages covering the following topics:

- The Problem
- The Solution
- Drop Off Locations
- FAO
- About the POD Program

We experienced one obstacle with the website that caused a delay. We originally intended to obtain a statewide list of drop-off locations from the U.S. Drug Enforcement Administration (DEA). However, there was an internal incident at the DEA which resulted in the deletion of the list. Subsequently, we had to develop the database of statewide locations from square one. This included identification of drop-off sites by Watershed Council staff, followed up by confirmation of the information by an intern. While this caused a delay with the information being available on the website, we were able to overcome the obstacle and achieve the end goal of allowing anyone in the state of Michigan to search for nearby medicine drop-off locations.

We have received great feedback regarding the website by the general public as well as individuals looking to replicate efforts in their respective communities. Numerous inquiries have been made via the website, with a significant portion of them being individuals searching for information on how to develop a community pharmaceutical program. As a result, we were able to help other communities within Michigan and the country develop proper disposal programs. This will further reduce the quantities of pharmaceutical compounds that end up in our water resources.

#### 2) Conduct Extensive Media Campaign

Develop a television commercial on the POD Program

Over the course of the grant period, we developed an effective and recognizable media

campaign to increase use of the collection events and permanent boxes throughout Northern Michigan. The campaign focused on magazine, television, and transit advertising for higher visibility and to reach a larger audience.

We developed three commercials that ran on four channels – 9&10 (WWTV), Fox 32 (WQFX), 7&4 (WPBN), and 29&8 (WGTU) – which are the main broadcast networks of NBC, ABC, FOX, and CBS. The commercials ran over 2,300 times during the grant period. The majority of these spots were run as public service announcements, free of charge. In addition to airing on television, the commercials were posted on other media outlets to increase the visibility, including the POD website (www.pillsinthepod.com), Facebook, and YouTube.

We viewed the process of commercial development as an opportunity to collaborate with the local college, North Central Michigan College. The college created a class, "Special Topic in Animation," designed specifically to produce an animated commercial for the POD Program. It allowed the students to gain real world experience and prepare for their future careers while participating in a project that benefits their local community. Because of this effort, we have developed a collaborative relationship with the college for future projects that will serve to protect and enhance the health of our waters.

Develop a magazine advertising campaign to reach a broader audience, including nontraditional allies

In addition to television commercials, we also developed a print media advertising campaign which focused on magazines that have broad Northern Michigan coverage. We developed a total of seven ads that ran a total of 43 times in seven publications. Many of the publications chosen have a longer life-span remaining in circulation, on average, for a quarter of the year. This allowed for the advertising to reach a greater audience over a longer time period of time with just one ad placement. The ads were designed to cater to the respective audiences of the publications. For example, readership of Docklines and Great Lakes Scuttlebutt is primarily recreational boaters and anglers so the message was focused on preventing contamination of fish. We placed POD advertisements in the following publications:

- Dining Guide
- Docklines
- GoodLife
- Great Lakes Scuttlebutt
- Silver Threads
- The Guide! Summer Edition
- Welcome North

Develop transit advertising, or ads on wheels, to further promote the POD Program throughout Northern Michigan

We developed six transit advertisements that ran on Emmet County Friendship Center buses. These buses serve the mobility needs of senior citizens by providing transportation to the elderly for a variety of purposes including doctor's appointments, employment, grocery shopping, volunteering, socialization, and assorted personal care requirements. This ad placement allowed us to directly reach senior citizens who are more likely to use pharmaceuticals and have a need for proper disposal. Two of the transit advertisements were delayed by one month due to bus replacements, but this did not impact the effectiveness of the mobile advertising.

The media campaign proved to be extremely effective and successful in raising awareness of the POD Program. Based upon survey results, almost 90% of survey respondents are aware of the POD Program and 84% of individuals believe the POD Program has raised their awareness about how and where to dispose of unwanted, unused, and expired medications. Of the almost 90% of respondents aware of the POD Program, 50% of them heard about the program from the television commercials. Anecdotally, the magazine and transit advertisements were seen by a large number of community members. However, this was not reflected in the survey results. Based on survey results, almost two-thirds of survey respondents learned about proper disposal of medications through commercials and newspapers. Given the impressive results from the television commercial, the Watershed Council would consider utilizing this media for promotion of other water protection efforts and would chose television over many of the other media options.

#### 3) Conduct Data Collection Through Surveys

Throughout the course of the grant period, we conducted a variety of surveys to obtain data on medicine disposal behavior of residents in Northern Michigan, as well as evaluate the success of the education and outreach and media efforts. We surveyed individuals who participated at community collection events, placed surveys at permanent drop-off locations, and conducted two large mail surveys.

Two direct mail surveys were sent to 20,000 randomly selected households within the four counties of Antrim, Charlevoix, Cheboygan, and Emmet. The first survey was sent out on January 31, 2014, prior to implementation of the outreach and media work. The second survey was mailed in September of 2015, almost two years after the education and outreach and media campaign began. To increase response rates of the mailed surveys, we created an online version using SurveyMonkey and we obtained donations from local businesses that were used a prizes in drawings among survey respondents. The response rate for the initial survey was 4% and it was 7% for the final survey. The typical response rate for Watershed Council prospect and renewal mailings is 1-2%, so the response rates for the POD surveys were considered good. Results of surveys were analyzed and compiled into reports, which are enclosed.

Surveys were also placed at four locations with permanent POD boxes, one in each of the counties within the Watershed Council's service area (Antrim County Sheriff, Charlevoix County Sheriff, Petoskey Department of Public Safety, and Cheboygan County Sheriff). Unfortunately, the survey boxes disappeared throughout the grant period. We installed a new survey box for the first one that disappeared, but chose not to replace any of the other survey boxes that disappeared. This was because there was minimal value to the information coming from the surveys at POD Box locations. Only a small number of surveys were filled out and many of those were incomplete. Only 65 surveys were filled out and submitted and of those, only half were complete.

Additionally, we conducted participant surveys at the community collection events to obtain data on medicine disposal behavior including type of medication being disposed of, who the medication belongs to, reason for disposal, awareness of the POD boxes, and more. The data from the surveys collected at POD drop-off locations and community collection events was analyzed and used to help evaluate the ultimate success of the POD Program as well as the education and media campaign project. A summary of results of participant surveys is enclosed.

#### 4) Implement Community Collection Events and Coordinate Disposal of POD Boxes

Conduct a minimum of 5 community collection events in 4 Northern Michigan Counties In 2014, six community collection events were held in four Northern Michigan counties – Antrim, Charlevoix, Cheboygan, and Emmet. Over 750 pounds of drugs and personal care products were collected, including almost 40 pounds of controlled substances, from approximately 280 participants. In 2015, seven community collections events were held. Again, over 750 pounds of medicines were collected from approximately 280 individuals. Comparing these numbers to the 2013 events which was prior to the grant objectives being implemented, we collected approximately 50-100 pounds more and 30-40 more people participated per year in both 2014 and 2015.

#### Implement disposal of POD Boxes twice a year.

A significant increase in volume occurred with medications disposed of at permanent drop off boxes. In 2013, prior to the grant period, 2,855 pounds of unwanted and unused medications and personal care products were collected from POD boxes and disposed of. The volume increased by approximately 1,000 pounds in 2014, with a total of 3,780 pounds collected and disposed of. Due to the education and outreach and media campaign, that number nearly doubled in 2015. A total of 6,334.9 pounds of pharmaceuticals and personal care products were collected via POD boxes and disposed of properly in 2015.

We estimated that we would properly dispose of over 6,000 pounds of pharmaceuticals and personal care products within the two year grant period. We ended up greatly exceeding this intended goal. During the two year grant period, we collected and

properly disposed of 11,664.15 pounds of unwanted and used medications and personal care products. This is a remarkable volume of drugs that we prevented from contaminating our water resources or falling into the wrong hands. This is also a huge testament to the success of the grant project.

Facilitate and participate in Pharmaceutical Collections Workgroup

The Pharmaceutical Collections Workgroup, whose membership consists of community organizations and agencies that are partners in the POD Program, met regularly to ensure the POD Program is organized, efficient, and continuously improved upon. The Workgroup was responsible for community collection event coordination and assisted with implementation of grant objectives. The Workgroup reviewed and provided feedback on grant deliverables, including the commercials, advertisements, publications, website, and surveys. They also assisted with distribution and promotional efforts.

#### 5) Grant Administration

Tip of the Mitt Watershed Council submitted all quarterly status and final reports per the requirements put forth in the Terms and Conditions of the Grant Award. In addition to reporting requirements, we conducted significant education and outreach to promote the project's goals and activities through press releases, media stories, Watershed Council newsletters, and other publications. As well, partners in the POD Program and other community entities, such as Lake Associations, also promoted the program and our efforts.

During the two year grant period, the Watershed Council sent out 11 press releases and 19 stories ran in various newspapers in Northern Michigan, including Petoskey News Review, Cheboygan Tribune, Harbor Light News, Straitsland Resorter, Charlevoix Courier, and the Associated Press. This does not include interviews and stories that were on broadcast via television and radio. We also promoted the program in all seven newsletters that were printed during the grant period as well as other publications such as our summer events calendars. In addition, we submitted articles on the POD Program to other magazines, including Docklines and Riparian Magazine.

In the end, the POD Program was heavily promoted through the media campaign as well as the general programming of the Watershed Council and our many community partners.

#### Efforts Outside the Scope of the Project

Additional work occurred in relation to proper medication disposal, the POD Program, and pollution prevention that were outside the scope of the grant project. A general POD brochure was reprinted for distribution at collection events, presentations, and in mailings. The Watershed Council used the publication for a membership mailing that went to 3,708 Watershed Council members and Emmet County Department of Public Works distributed the brochure to all residents who use their curbside recycling services.

A sharps collection program was initiated during the course of the grant. Through community collection events and survey results, we saw a need to develop a better way for people to dispose of sharps. We developed a sharps pilot project where we distributed Safe-Clip<sup>TM</sup> Needle Clipping & Storage Devices at community collection events. Through research and surveying individuals who tried the Safe-Clip, we realized there was still a need for sharps management for those needles that are too large for the clipper. As a result, a POD partner, McLaren Northern Michigan, decided to start bimonthly sharps collection events at their hospital campus in Petoskey. This addresses a public safety and pollution problem that can result from the improper disposal of sharps.

In addition, we had doctor offices and health clinics reach out to us to develop posters to promote proper disposal of unwanted and unused medications as well as provide disposal locations. We took the opportunity to develop an educational poster to provide another venue to share the message of proper medicine disposal.

We were also invited to participate in community events to promote the POD Program and provide the public with vital information about the problems associated with improper disposal and POD locations. We participated in a Placeshifting Fair and Health Fair in Charlevoix County, and provided presentations to various civic organizations such as Harbor Springs Kiwanis.

All of these efforts served to build upon the education and outreach and media efforts of the grant project. Taken together, they served to enhance the POD Program which prevents contamination of Michigan's water resources and protects the health and safety of residents in Northern Michigan.

#### **Partners**

Original partners in the POD Program include HARBOR Inc., Emmet County Department of Public Works, Little Traverse Bay Bands of Odawa Indians, McLaren Northern Michigan, Prescription Services Pharmacy, Charlevoix County Recycling Program, Charlevoix County Conservation District, Northwest Michigan Community Health Agency, Charlevoix Area Hospital, Charlevoix County Commissioners, Charlevoix County Commission on Aging, Central Drug Store, Antrim County Sheriff's Office, Boyne City Police Department, Charlevoix County Sheriff's Office, City of East Jordan Police Department, City of Charlevoix Police Department, City of Petoskey Department of Public Safety, Cheboygan County Sheriff Department, Cheboygan Department of Public Safety, Elk Rapids Police Department, Emmet County Sheriff's Office, Grand Traverse County Sheriff's Office, Harbor Springs Police Department, Little Traverse Bay Bands of Odawa Indians Tribal Police, Mackinaw City Police Department, Mackinac County Sheriff's Office, St. Ignace Police Department, and Tuscarora Township Police Department.

Additional partners that were acquired during the grant period include: North Central Michigan College, Northern Michigan Regional Entity, Alpena City Police, Alpena County Sheriff Department, Chocolay Township Police Department, City of Mackinac Island Police Department, Forsyth Township Police Department, Gerrish Township Police Department, Iosco County Sheriff Department, Ishpeming City Police Department, Kalkaska County Sheriff, Luce County Sheriff Department, Marquette City Police Department, Negaunee City Police Department, Ogemaw County Sheriff Department, Oscoda County Sheriff Department, Oscoda Township Police, Otsego County Sheriff, Roscommon Sheriff Department, and Tawas Police Authority.

Each entity plays a unique and vital role in the overall success of the POD Program. Law enforcement agencies are responsible for the permanent collection boxes including monitoring use, storage, and disposal of collected materials. Additionally, law enforcement personnel host the community collection events so we are able to accept controlled substances. McLaren Northern Michigan, Emmet County DPW, and Charlevoix County provide funding and location sites for the community collection events. All of the partners volunteer at the community events, assist in the development of media and promotional items, and participate in education and outreach to continue to enhance the POD Program to benefit the health of the aquatic ecosystem and our community.

#### **Products**

Brochures (2)

Advertisements (8)

- Dining Guide
- Docklines
- GoodLife
- Great Lakes Scuttlebutt
- Silver Threads
- The Guide! Summer Edition
- Welcome North
- Emmet County Friendship Center bus

Commercials (3)

Surveys (3)

- Pre-grant survey
- Post-grant survey
- Survey at POD Box locations
- Summary of POD Participant Surveys
- Survey Reports (2)
  - o Understanding Medicine Disposal In Northern Michigan
  - o Evaluating the Success of the Outreach and Media Campaign

Meeting Invite

Press Releases (11)

#### Printed Articles

- News Articles
- Watershed Council Publications
  - o Current Reflections newsletters (6)
  - o Summer Events Calendars 2014 and 2015
  - o 2014 Annual Report
- Other Publications
  - o Riparian Magazine
  - Docklines
  - o Elk-Skegemog Lake Association newsletter
  - o Emmet County Department of Public Works newsletter

Webpage – <u>www.pillsinthepod.com</u>

#### **Project Sustainability**

The media campaign and targeted education and outreach served to build a long-term awareness with residents, and even visitors to Northern Michigan. This awareness has created a change in behavior and the majority of the Northern Michigan community will use the POD Program for the proper disposal of unwanted and unused medications when they need to. This will continue beyond the grant period. Additionally, Tip of the Mitt Watershed Council and POD partners have committed to the POD Program as part of our general programming. We will continue to collect medications through community collection events and at permanent boxes to achieve our ultimate goals of reducing pharmaceuticals in the waterways and on the streets.

Also, the Watershed Council recently applied for another grant for additional education and promotion of the POD Program. If funded, we intend to build upon the work conducted as part of this project by using our relationship with the school systems to directly educate youth, to work with local pharmacies to distribute information to individuals filling prescriptions, and to purchase more air time for POD commercials, since this was by far the most effective way to reach the community with vital information.

#### Summary

In closing, by awarding the grant to Tip of the Mitt Watershed Council, the Michigan Department of Environmental Quality, Pollution Prevention Program created an opportunity to address the critical need to educate the Northern Michigan community about proper disposal of medicines. From the feedback received, the educational efforts completed as part of the grant were highly successful in its purpose to increase knowledge and awareness of the POD Program. We have received significant positive feedback from community members and organizations, elected officials, and representatives of state agencies. In addition, the various grant projects completed have generated many calls to the Watershed Council. These inquires provide yet another excellent opportunity for one-on-one education and outreach in our Northern Michigan community.

Another indicator of success was the significant increase in volume of unused and unwanted medications collected during the grant period. It was extremely impressive to see the volume double from approximately 3,500 pounds in 2013 to over 7,000 pounds in 2015.

In addition to tangible benefits in terms of increasing the awareness and use of the POD Program, this project created a wonderful opportunity to build relationships between community and government agencies. This project resulted in a coordinated effort on behalf of a range of agencies, organizations, and individuals concerned about risks improper disposal of medications pose to our Northern Michigan's waters, community, and families. In doing so, this project created a framework for cooperation that will serve as a foundation for future collaboration. Not only will this benefit Northern Michigan, but it can serve as a model for other communities throughout the country.

If you have any questions about this report, please feel free to contact me at (231) 347-1181 ext. 114 or via e-mail at <a href="mailto:jenniferm@watershedcouncil.org">jenniferm@watershedcouncil.org</a>.

Sincerely,

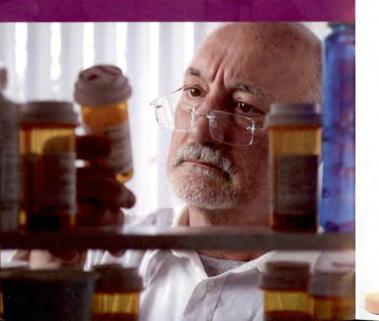
Jennifer McKay Policy Specialist

## Prompt DISPOSAL Is Important

When someone dies it is important that their medicines are disposed of safely and in a timely manner.

Not getting rid of medications can leave them accessible to people who should not have them. Unfortunately, medications are stolen frequently and find their way into the hands of those who will abuse them. More people are dying from abusing prescription drugs than ever before.

Keeping medicines after they are no longer needed also creates an unnecessary health risk in the home, especially in homes where there are children present. Even child resistant containers cannot completely prevent a child from taking medicines that belong to someone else. In a study that looked at cases of accidental child exposure to a grandparent's medicine, 45% of cases involved medicines stored in childresistant containers.





### Proper DISPOSAL Is Important

Not only it is important to get rid of leftover medications in a timely manner, they must be disposed of properly.

#### DO NOT Flush or Pour

Disposing of medications in the toilet or sink can cause contamination in our aquatic environment because wastewater treatment systems, including septic tanks, are not designed to remove many of these medications. Flushing or pouring medications down the drain may be harmful to fish, wildlife, and their habitats.

#### **DO NOT Throw Out**

Throwing medications away in the garbage may be dangerous since they can end up in the mouths of children and household pets. Additionally, there is a growing danger from "dumpster divers" who look for old pills and pill containers then steal the private information that's printed on the label.

#### **DO NOT** Give Them Away

Giving medicine to friends or family is not only potentially illegal, but a drug that works for you could be dangerous for someone else. A small number of medicines may be especially harmful, and in some cases are fatal with just one dose.

## Properly Dispose of Unwanted Medications – Put Your Pills in the POD!

The best solution is to dispose of leftover medications through Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program. The POD Program offers a safe, free, and environmentally sound way for residents to properly dispose of medications. The POD Program offers community collection events as well as permanent drop-off boxes at law enforcement offices throughout

Northern Michigan. By using the POD Program and properly disposing of leftover medications, you will help us keep our rivers and drinking water clean and our communities and families safe.



For more information on the POD Program and Additional Drop-off Locations, visit:

www.PillsInThePOD.com



#### **An Unexpected Decision**

Death is never easy to deal with, especially when someone close to you has died. When someone dies, whether following a period of illness or completely unexpected, there are many decisions to make and practical arrangements that you need to put in place. One of the inevitable tasks is sorting through personal belongings of the deceased. During this process, you may come across some personal possessions that you're not sure what to do with such as unused medications which are no longer required.



#### **POD Drop-Off Locations**

Antrim County Sheriff's Office

107 Grove Street, Bellaire, MI 49615

Boyne City - City Hall

319 North Lake Street, Boyne City, MI 49712

Charlevoix County Sheriff's Office - Jail Entrance

1000 Grant Street, Charlevoix, MI 49720

Charlevoix County Sheriff's Office - Beaver Island Substation

37830 Kings Highway, Beaver Island, MI 49782

**Cheboygan County Sheriff Department** 

870 S. Main Street. Cheboygan, MI 49721

Cheboygan Department of Public Safety - Cheboygan City Hall

403 N. Huron Street, Cheboygan, MI 49721

City of Charlevoix Police Department

210 State Street, Charlevoix, MI 49720

City of St. Ignace Police Department 396 N. State Street, St. Ignace, MI 49781

East Jordan Police Department

326 Main Street, East Jordan, MI 49727

**Elk Rapids Police Department** 

321 Bridge Street, Elk Rapids, MI 49629

Emmet County Sheriff - Jeffery P. Bodzick Administrative Office and Correctional Facility (Jail Entrance)

450 Bay Street, Petoskey, MI 49770

Emmet County Sheriff - Richard L. Zink Law Enforcement Center

3460 Harbor-Petoskey Road (M-119), Harbor Springs, MI 49740

Grand Traverse County Sheriff/Traverse City Police Department 851 Woodmere Avenue, Traverse City, MI 49686

**Harbor Springs Police Department** 

170 Zoll Street, Harbor Springs, MI 49740

Little Traverse Bay Bands of Odawa Indians Tribal Police Department

911 Spring Street, Lower Level, Petoskey, MI 49770

Mackinac County Sheriff's Office

100 South Marley Street, St. Ignace, MI 49781

Mackinaw City Police Department - Village Hall

102 S. Huron Avenue, Mackinaw City, MI 49701

Petoskey Department of Public Safety - Front Lobby of City Hall

101 East Lake Street, Petoskey, MI 49770

Petoskey Department of Public Safety- Public Safety Station West (Bay Harbor)

3625 Charlevoix Avenue, Petoskey, MI 49770

**Tuscarora Township Police Department** 

3546 Sturgeon Avenue, Indian River, MI 49749





This publication was produced by Tip of the Mitt Watershed Council with funding provided by Michigan Department of Environmental Quality Community Pollution Prevention Grant Program.

# What To Do With UNUSED MEDICATIONS



Keeping your family safe and our waters clean!



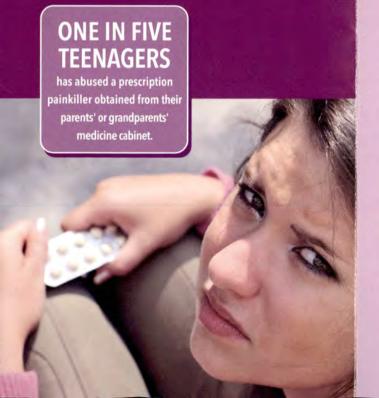
www.PillsInThePOD.com

#### Protect Your CHILD

Failure to dispose of expired or unused prescription medications may result in the medications falling into the wrong hands.

- One in five teenagers has abused a prescription painkiller obtained from their parents' or grandparents' medicine cabinet.
- Approximately 60 percent of people who abuse prescription painkillers indicate that they obtained the prescription drugs from friends or relatives for free, often taking the drugs without permission.

Tossing the medications into the trash gives kids, grandkids, and pets the opportunity to get at them, and a wastebasket is a likely place for family drug abusers to check after they've looked in the medicine cabinet.





### WATERS

#### DO NOT Flush or Pour

Disposing of medications in the toilet or sink can cause contamination in our aquatic environment because wastewater treatment systems, including septic tanks, are not designed to remove many of these medications. Flushing or pouring medications down the drain may be harmful to fish, wildlife, and their habitats. Humans can also be exposed to these chemicals when they drink water drawn from contaminated bodies of water or eat wild game or fish.

#### DO NOT Throw Out

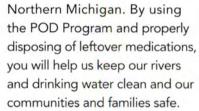
Medication that is thrown in the trash will eventually end up in a landfill, which only delays the pharmaceutical chemicals from reaching groundwater or rivers and lakes. Leachate from landfills, containing medicines, is collected and piped or trucked to wastewater treatment plants before it is discharged into nearby rivers and lakes.

For more information on the POD Program and Drop-off locations near you, visit: www.PillsInThePOD.com

#### Properly Dispose of Unwanted Medications -

#### Put Your Pills in the POD!

The best solution is to dispose of leftover medications through Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program. The POD Program offers a safe, free, and environmentally sound way for residents to properly dispose of medications. The POD Program offers community collection events as well as permanent drop-off boxes at law enforcement offices throughout





### Keeping your family safe and our waters clean!

Medications in your home can leave them accessible to people who should not have them. Whether in your medicine cabinet or casually thrown in the trash, young children, teens, and even pets can get a hold of them. On top of this, our water supplies are growing ever more contaminated with medications. Given these risks, it's important that parents take steps to properly dispose of medication and put your pills in the POD!



#### **POD Drop-Off Locations**

Antrim County Sheriff's Office

107 Grove Street, Bellaire, MI 49615

Boyne City - City Hall

319 North Lake Street, Boyne City, MI 49712

Charlevoix County Sheriff's Office - Jail Entrance

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Charlevoix County Sheriff's Office - Beaver Island Substation

37830 Kings Highway, Beaver Island, MI 49782

**Cheboygan County Sheriff Department** 

870 S. Main Street. Cheboygan, MI 49721

Cheboygan Department of Public Safety - Cheboygan City Hall

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Petoskey Department of Public Safety- Public Safety Station West (Bay Harbor)

3625 Charlevoix Avenue, Petoskey, MI 49770

TuscOarora Township Police Department

3546 Sturgeon Avenue, Indian River, MI 49749





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## Put your pills in the POD!



Keeping your family safe and our waters clean!



www.PillsInThePOD.com



YOU CAN HELP keep unused medicines and prescription drugs out

pills in the POD.



PRESCRIPTION & OVER-THE-COUNTER DRUG DROP-OFF

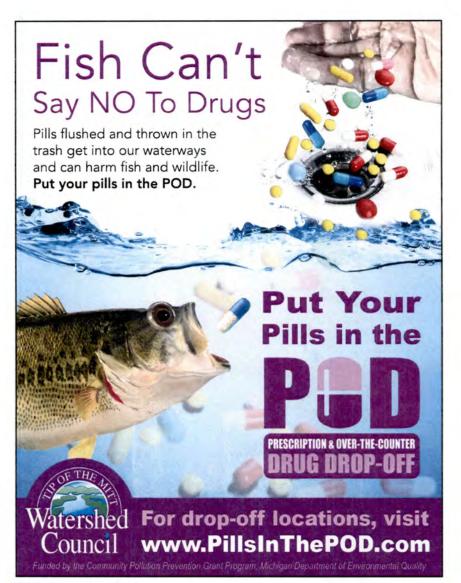


Proper disposal of unwanted or unused medications protects our water resources and our community.

For drop-off locations and collection events, visit

www.PillsInThePOD.com

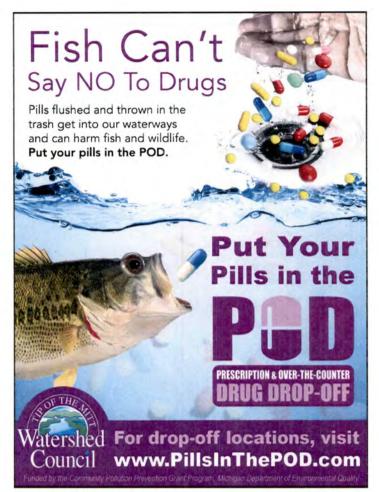
Funded by the Community Pollution Prevention Grant Program, Michigan Department of Environmental Quality



POD Campaign 2014 Docklines - 1/4 page, full color ad



POD Campaign 2014 Good Life - 1/4 page, full color ad



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#### POD Campaign - 2014

Scuttlebutt Magazine - Website Banner ad

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468 x 60 Web Ad - 3 slide animated gif

Slide 1



Slide 2

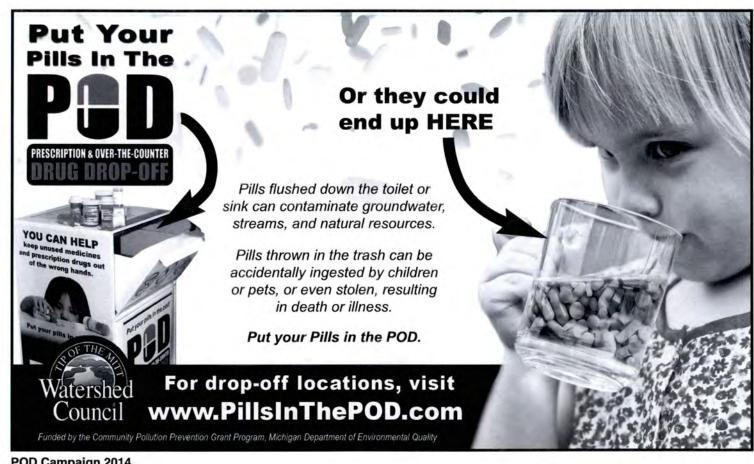
Put Your Pills in the



Slide 3



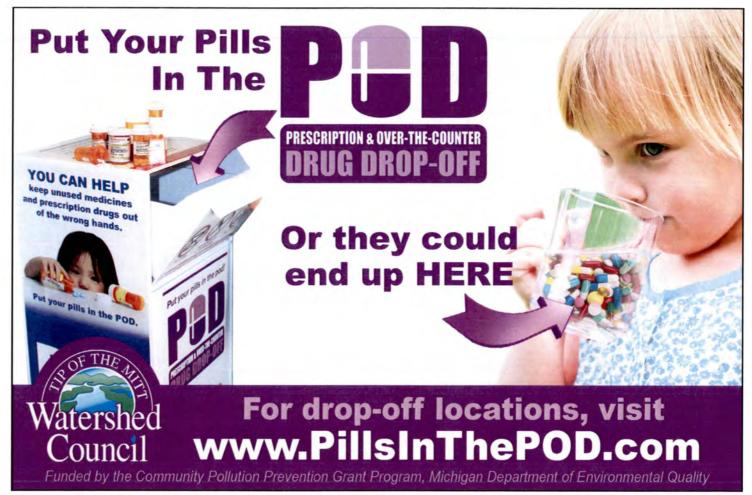
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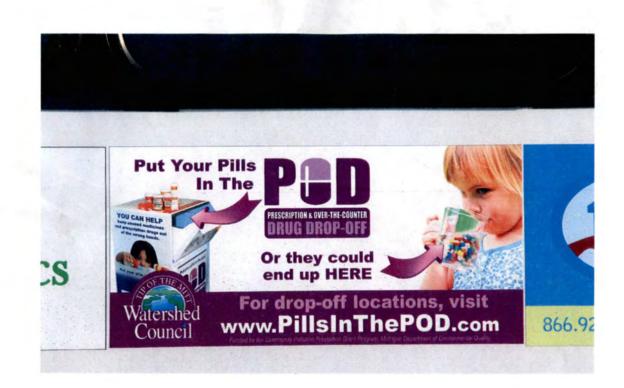
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POD PROGRAM SURVEY
Tip of the Mitt Watershed Council
426 Bay Street
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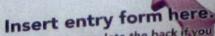
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Prizes courtesy of





This survey is being conducted by Tip of the Mitt Wets, part of a grant project supported by the Community Pa-Grant Program, Michigan Department of Environment

#### Insert entry form here.

Be sure to complete the back if you want to be entered into the drawing for one of three \$50 VISA Check Cards!

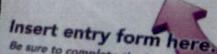
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We need your help!

Complete the survey below to help us

protest Northern Michigan's water resources

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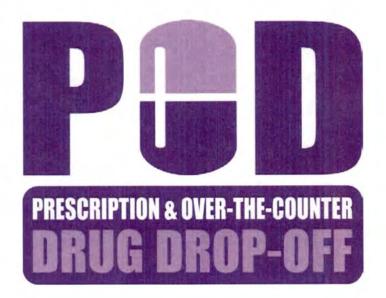
SEP VISA Check Cards

Be sure to complete the back if you want to be entered into the drawing for one of three \$50 VISA Check Cards





# UNDERSTANDING MEDICINE DISPOSAL IN NORTHERN MICHIGAN





Tip of the Mitt Watershed Council

426 Bay Street

Petoskey, Michigan 49770

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www.watershedcouncil.org

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Tip of the Mitt Watershed Council completed this survey and report with funding from the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program. Tip of the Mitt Watershed Council maintained editorial control and the conclusions expressed here are those of the author.

September 2014

#### **KEY FINDINGS**

- Almost all households (96%) have at least one individual or pet that currently uses
  prescription or nonprescription medications. Many of those medications will go unused
  or expire and will need to be disposed of.
- Most people (75% or greater) are aware of the various problems associated with improper disposal of medications including contamination of water resources, thefts to obtain prescription drugs, and that prescription drug abuse is becoming the fastest growing drug problem in the United States. The greatest concerns for households in Northern Michigan are contamination of water resources and that medication could be accidentally ingested by children.
- A desire to avoid contamination of water and the environment is the primary factor that influences how someone will dispose of and or manage unused medications, followed by convenience or ease of disposal.
- In the past 12 months, 70% of households in Northern Michigan disposed of unwanted or expired medications.
- A majority of residents (66%) are aware of the Prescription and Over-the-Counter Drug
  Drop-off Program (POD) in Northern Michigan, but less than half have actually used the
  program to dispose of unwanted or expired medications. Households in Emmet County
  have the highest awareness of the program and used the POD Program more than
  residents from other counties in Northern Michigan.
- The most common way to dispose of medications has been disposal at POD drop-off boxes at law enforcement offices, which fully protects water resources and public health and safety. However, this disposal method was only used by a quarter of respondents.
- The next two most used methods of disposal, throwing in the garbage (22%) and taking to a pharmacy (20%), still pose risks to the public health and safety of residents and the environment.
  - Throwing medicines in the garbage is not safe because the drugs can be found and used by others such as kids, pets, and even burglars. Additionally, medications thrown in the trash will eventually end up in landfill leachate, which only delays the pharmaceutical chemicals from reaching groundwater or rivers and lakes.
  - Regulations to date have prohibited pharmacies from taking back controlled substances. A controlled substance is a drug or other substance that is regulated under the Controlled Substance Act due to its potential for abuse and addiction. Examples include OxyContin, Percocet, Morphine, Hydrocodone, Valium, Xanax, Adderall, and Ambien. Returning medicines to a pharmacy means households still have the controlled substances, which are the most dangerous and abused drugs, in their home or these medications are not disposed of in a manner that fully protects the environment. This could change with new Drug Enforcement Agency (DEA) regulations allowing pharmacies to collect controlled substances under certain conditions, which will become effective on October 9, 2014.
- The preferred disposal method for medicines is a permanent drop-off box at law enforcement offices (59%).

#### BACKGROUND

Improper disposal of unused or expired medicines can pose a significant danger to our water resources, families, and community.

Medicines are produced and prescribed in increasing volumes every year. Thousands of tons of pharmaceuticals are used across the globe, and Americans alone fill more than three billion prescriptions a year. Four out of five people leave a doctor's office with a prescription and twenty to sixty percent of those prescription medications go unused. The unused medications are eventually disposed of and much of that medication has been disposed of improperly.

With more than 30 million people living around the Great Lakes, an untold number of unused and expired medications are flushed down the toilet every day. After being flushed or poured down a drain, many medicines pass through sewer and septic systems. Sewage treatment plants and septic systems are not designed to treat all the substances contained in medications. Therefore, most of these chemicals pass through the treatment systems and accumulate in rivers, lakes, groundwater, and even our drinking water.

As a result, there is widespread contamination of our waterways by pharmaceuticals. Over 80% of waterways tested in the United States show traces of common medications such as acetaminophen, hormones, blood pressure medicine, codeine, and antibiotics, according to a study by the U.S. Geological Survey. A 2008 investigation by the Associated Press found that there were drugs in the drinking water supplies of 41 million Americans.

Pharmaceutical contaminants are a steady source of chemical exposure for aquatic species, and affect the quality of the waters we rely upon for drinking and look to for recreation. This can cause adverse effects in fish and other aquatic wildlife as well as unintentional human exposure to chemicals in the medications. Some of the chemicals interfere with or mimic natural hormones and disrupt reproduction, development and behavior of fish and other organisms.

Throwing medications in the trash poses risks as well. Children or pets might get to them accidentally or adults with drug abuse problems could get to them on purpose. Also, throwing medicine in the trash only delays the pharmaceutical chemicals from reaching groundwater or rivers and lakes. Scientists from the U.S. Geological Survey have found that pharmaceuticals, personal-care products, and other contaminants of emerging concern are widespread in water that has passed through landfills, known as leachate. Leachate from landfills is collected and piped or trucked to wastewater treatment plants before it is discharged into nearby rivers and lakes. So regardless of the pathway - whether effluent from treatment plants and septic systems or leachate from landfills – medicines are still entering out waterways.

In an effort to prevent contamination of our water resources and to reduce misuse of pharmaceuticals, many cities and counties have organized collection programs for their citizens to properly dispose of unneeded medicines. The Tip of the Mitt Watershed Council has been working in Antrim, Charlevoix, Cheboygan, and Emmet Counties in Northern Michigan, along

with several partners, to organize a community collection and disposal program for pharmaceuticals and personal care products.

Since 2008, Tip of the Mitt Watershed Council has been working as a key partner in the development and expansion of the Prescription and Over-the-Counter Drug Drop-Off Program or POD Program. The POD Program is a multicounty-wide medication drug-take back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties and over 20 permanent drop-off boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter pharmaceuticals, and personal care products for free and the POD Program is the only program in Northern Michigan that can currently accept and dispose of controlled substances. The POD Program also includes community education and outreach on the importance of proper disposal of unwanted medications.

In an effort to increase awareness and use of the program, Tip of the Mitt Watershed Council obtained a grant from the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program to conduct an education and outreach and media campaign. As part of the project, there was a need to evaluate the current medicine disposal behaviors of Northern Michigan residents. To fill this knowledge gap, Tip of the Mitt Watershed Council surveyed local residents from the four counties of Antrim, Charlevoix, Cheboygan, and Emmet to gather information on how medicines are stored and disposed of in Northern Michigan. This report describes the findings from the survey. Additionally, information on disposal behaviors obtained through this survey as well as a follow-up survey that will be conducted in 2015 will be used to evaluate the success of the education and outreach and media campaign for the POD Program in Northern Michigan.

#### SURVEY METHODOLOGY

Tip of the Mitt Watershed Council conducted a random mail survey of 20,000 households in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The survey was conducted as part of a grant project funded by the Community Pollution Prevention Grant Program, Michigan Department of Environmental Quality. The purpose was to study the ways in which residents of Northern Michigan dispose of their prescription and nonprescription medicines once they are done with them.

A mailing list was obtained from Redi-Data, a database management company, which compiles data using 29 billion records from over 100 different sources to aggregate a consumer database every year. Raw data is gathered from real estate and tax assessments, voter registration files, utility connects, bill processors, behavioral data, and other sources before integrating dozens of proprietary enrichment sources. Five thousand names were randomly selected for each of the four counties and the surveys were mailed via the U.S. Postal Service on January 31, 2014.

In attempt to increase the response rate for the survey, those individuals who fully completed the survey were eligible to be entered into a drawing to win one of five prizes. The deadline for

returned surveys to be entered into the drawing was March 7, 2014, for a total data collection period of approximately 5 weeks. However, additional completed surveys were returned after the March 7, 2014 deadline. In total, 793 surveys were completed out of a starting sample of 20,000, for a response rate of 4%. Of the 793 surveys, 787 were complete, 2 were not complete, and 4 were destroyed by the automated mail system and, therefore, unable to be included in the analysis.

The questionnaire used for this study (see Appendix A) contained closed-ended questions, including those with yes/no responses and those with multiple response options. In addition, the questionnaire included many other-specify options. Other-specify questions are generally the last option in a multiple response option question and provide respondents with the opportunity to answer a question with a response not listed in the set of responses.

Throughout the report, the results of the yes/no and multiple response option questions are presented as tables or figures. A full summary of the data is available in Appendix C.

#### **USE OF MEDICATIONS**

The vast majority of households has at least one person or pet that use prescription and nonprescription medications currently, 96%, as shown in Figure 1.

When asked about leftover medications and expired medications, about 48% of respondents said they have prescription medications that have expired and another 7% indicated they were not sure if they currently had expired or otherwise unwanted medications in the home. Responses are shown in Figure 2.



Figure 1.

Does any person or pet in your household use medication?



Figure 2.

Do you currently have leftover medications in your home?

When asked why they have unused medications in their home, the most common answer given by respondents was that a there was a change in prescription or dosage (37%), followed by medicines being expired (27%). Death of a family member or friend only accounted for a small portion of used medications (1.27%). Responses to why medicines go unused in Northern Michigan households are presented in Figure 3.



Figure 3.
What is the most common reason medications go unused in your household?

Those who reported that medicines go unused for some other reason were asked to specify what that reason was. The table below presents the categories under "other" for which the responses were classified and the corresponding count of the number of responses per category. For a complete list of responses to this question, see Appendix B.

Table 1. Categories of "Other" Reason That Medications Go Unused

	# mentions
All of the above	11
Prescribed "as needed" and no longer needed	21
Quantity of pills too large	5
Took entire prescription	15
Do not have any medications	26

#### DISPOSAL OF MEDICATIONS

In the past twelve months, almost 70% of respondents disposed of unwanted or expired medications. Of those, the majority disposed of less than one pound of medications (64%), while approximately 5% disposed of between 1 and 5 pounds of medicines, and only 2 respondents had disposed of over 5 pounds of unwanted pharmaceuticals in the last 12 months (Figure 4).

When asked how frequently disposal of medication occurs, 39% dispose of expired and unwanted medications once every few years. Twenty eight percent (28%) of households dispose of medicines once a year and 19% dispose of them more often, a few times a year. Almost 13% of respondents have never disposed of medication, as shown in Figure 5 below.

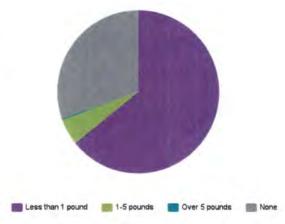
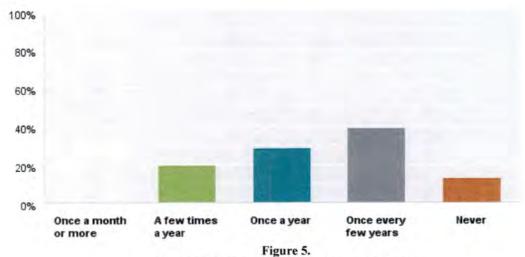


Figure 4.
What is the amount of unused medications that you have disposed of in the past 12 months?



How frequently do you dispose of medications?

The most common method of disposal is a POD permanent drop-off box at law enforcement offices (25% of respondents used this method currently), followed by throwing away medications in household garbage (22% of respondents reported doing so). Almost 20% of respondents reported taking their unused/expired medications to a pharmacy to get rid of them, and 18% dropped medications off at a POD community collection event. Only 6% of respondents indicated disposing of medications in the sink and toilet. While almost 16% kept medications, less than 3% keep them in locked cabinets or storage. Approximately 6% of households reported

that they don't know how to dispose of unwanted or expired medications, and almost 12% reported a disposal method not included on the list. (Figure 6)

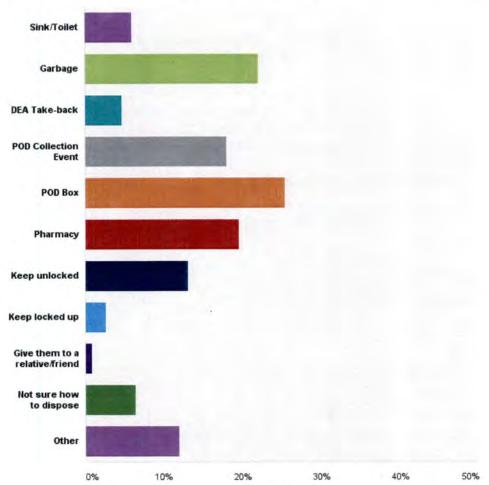


Figure 6.

How do you currently dispose of unwanted and unused medications?

Those who reported disposing the medications in some other way were asked to specify the way in which they did so. The categories pertaining to this open-ended question, along with the number of mentions for each, are listed in Table 2. Complete list of responses is available in Appendix B.

Table 2. Categories of "Other" Medication Disposal Method

	# mentions
Burn	10
Mix with undesirable substance and then throw in trash	5
Return to Physician/Doctor's office	8
Sharps box	2
Never dispose of them	40

## AWARENESS OF PROBLEMS WITH IMPROPER DISPOSAL OF MEDICATIONS

Respondents were asked if they were aware of the various problems associated with improper disposal of medication and their level of concern about each respective problem.

Three quarter of respondents were aware that recent studies have revealed trace amounts of pharmaceuticals are present in surface, ground, and drinking water and almost 44% of those were very concerned about this problem. Of the approximately 20% of respondents that were not aware, the majority (18%) were concerned about trace medicines in waterways (Table 3).

Table 3. Awareness and Concern of Pharmaceuticals in Water Resources

Answer Choices	Responses	
Not aware, am concerned	18.25% 144	
Not aware, not concerned	2.15% 17	
Aware, VERY concerned	43.73% 345	
Aware, SOMEWHAT concerned	33.21% 262	
Not concerned	2.15% 17	

Over 80% of respondents were aware that there has been an increase in home invasions and burglaries to pharmacies and veterinary offices recently by prescription drug seekers/abusers, with almost half (45%) only somewhat concerned about this problem. Six percent of responders who were not aware are now concerned and about 12 percent were not concerned about this issue at all (Table 4).

Table 4. Awareness and Concern of Home Invasions and Burglaries

Answer Choices	Responses
Not aware, am concerned	5.96% 47
Not aware, not concerned	0.76% 6
Aware, VERY concerned	35.61% 281
Aware, SOMEWHAT concerned	45.37% 358
Not concerned	11.15% 88

Again, a significant majority of respondents, almost 83%, were aware that prescription drug abuse has become the fastest growing drug problem in the United States and that poisoning deaths, including drug overdoses from prescription drugs, are now the leading cause of injury death. Forty-five percent of respondents who were aware are very concerned with this epidemic, while approximately 10% of respondents are not concerned at all (Table 5).

Table 5. Awareness and Concern of Drug Abuse

Answer Choices	Responses	
Not aware, am concerned	5.58% 44	
Not aware, not concerned	1.01% 8	
Aware, VERY concerned	44.99% 355	
Aware, SOMEWHAT concerned	37.64% 297	
Not concerned	9.38% 74	

When asked the top 2 concerns regarding improper disposal of medications, contamination of water and the environment was the greatest concern (almost 80% of respondents), followed by approximately 60% of respondents concerned that medications will be ingested by children or someone other than the person who was prescribed them. Concern that medications will be stolen or abused by family and friends was not as great, with approximately 11% and 9% respectively. Over 16% of respondents had no concerns with their current disposal method. Answers presented in Figure 7.

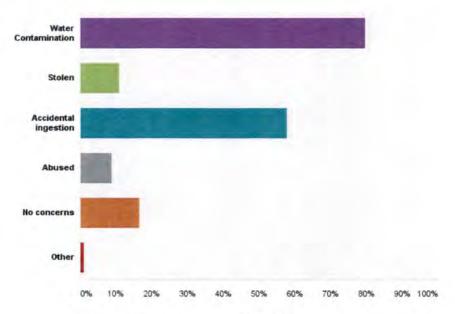


Figure 7.
What are your top 2 concerns regarding improper disposal of medications?

#### AWARENESS AND USE OF POD PROGRAM

The majority of respondents, 66%, are aware of the POD Program in Northern Michigan. As seen in Figure 8, of those not aware of the program, 16% of respondents indicated they would like to learn more about the program.

Forty-three percent (43%) of respondents have used the POD Program in Northern Michigan and approximately 18% of individuals indicated that while they have not used the POD Program to date, they will in the future.

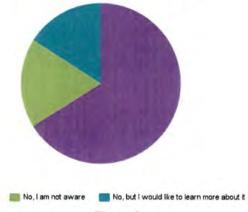
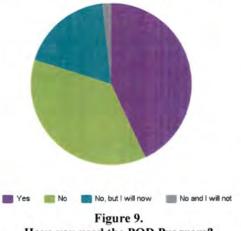


Figure 8. Are you aware of the POD Program?



Have you used the POD Program?

Only a very small percentage of respondents (1.77%) stated they would not use the POD Program in the future, shown in Figure 9.

Those Northern Michigan residents that have used the POD Program previously were asked to specify which drop-off method, community collection or permanent drop-off box, they used. Twenty-one percent have used the permanent drop-off box at law enforcement offices, 15% have used a community collection event to dispose of medications, and 8% of respondents have used both POD options. Responses are provided in Figure 10 below.

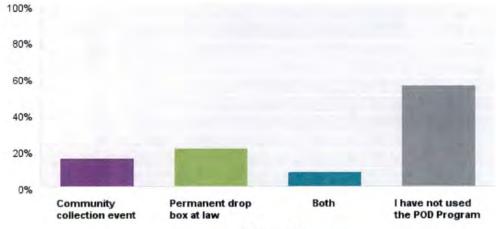


Figure 10. What method of POD disposal did you use?

Respondents from Emmet County have utilized the POD Program the most, followed by Charlevoix County residents, as opposed to respondents from Antrim and Cheboygan Counties who were more likely to return unwanted or expired medications to a pharmacy. Emmet County offers the most POD disposal options with more permanent drop-off boxes and more collection events available than the other 3 counties, which could explain why use of the POD Program is greatest in Emmet County. Additionally, respondents from Emmet County had the highest awareness about the existence of the POD Program, with 72% aware of the POD Program in Northern Michigan. A comparison of disposal behavior by county is provided in Table 6 below.

Table 6. Disposal Method Breakdown By County

	Dispose of in the sink/toilet	Throw away in the garbage	Return to a Drug Enforcement Agency (DEA) National Take-Back Event	Return to a POD community collection event	Return to a POD permanent box at law enforcement offices	Return to pharmacy	Keep in unlocked cabinets or storage	Keep in locked cabinets or storage	Give them to a relative or friend	I don't know how to dispose of them	Other (please specify
Antrim	8.28%	26.21%	6.21%	11.03%	16.55%	30.34%	11.03%	4.83%	1.38%	7.59%	10.349
Charlevoix	4.72%	19.31%	4.72%	20.17%	23.61%	13.73%	18.45%	2.15%	0.43%	6.44%	11.599
Cheboygan	4.73%	21.62%	2.70%	8.78%	20.95%	38.51%	10.14%	2.70%	0.68%	6.76%	12.849
Emmet	6.61%	22.18%	5.06%	25.68%	34.24%	9.34%	11.28%	1.56%	1.17%	5.06%	14.40
Total Respondents	47	172	37	142	198	167	103	20	7	49	98

#### FACTORS INFLUENCING DISPOSAL DECISIONS

The survey included a question about the respondent's willingness to travel to properly dispose of medications. Table 7 shows the responses to the question of how much time respondents would be will to spend travelling to properly drop off unused medications. Almost half of the respondent said they would be willing to travel 15 minutes or more, with 8% willing to spend more than 30 minutes traveling to a drop-off location. Approximately 6% of respondents would not spend more than 5 minutes travelling, while about 3% are not willing to travel at all.

Table 7. Time Willing to Spend Travelling to Properly Dispose of Medications

	Responses			
1-5 minutes	51	(6.46%)		
5-15 minutes	332	(40.81%)		
15-30 minutes	295	(37.39%)		
More than 30 minutes	63	(7.89%)		
I would not be willing to travel	20	(2.53%)		

Respondents were asked to select the three factors that most impact how they dispose of or manage unused medicines. The top three responses selected were the desire to avoid contamination to the water or environment (76%), convenience or ease of disposal (66%), and the desire to avoid the risk of drug misuse or abuse (39%). Thirty-five percent (35%) chose the desire to avoid the risk of accidental poisoning. Cost was not one of the primary factors impacting decisions with only 17% of respondents selecting this option. Answers to the factors impacting disposal behavior are provided in Figure 11.

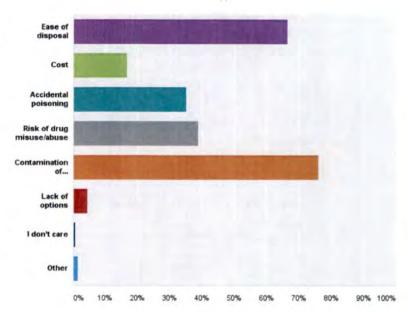


Figure 11.

What factors most impact your decision about how to dispose of medications?

Respondent's preferred method for disposal of unused, unwanted, or expired medications are shown in Figure 12. Permanent drop-off box at law enforcement offices is the most preferred disposal option; 59% of respondents selected this disposal method. Returning medications to a pharmacy is the next preferred option (55%), followed by community collection events (38.4%). Disposal methods also chosen include store in the house for future use (10%), throwing medications in the trash (8%), a mail back program (5%), and 3% still prefer to dispose of unwanted and expired pharmaceuticals down the sink or toilet. Only 1% of respondents were not interested in disposing of medications.

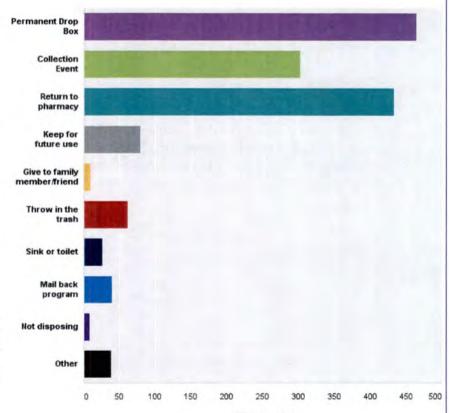


Figure 12.
What is your preferred method for disposal of medications?

Those who selected that they preferred disposing the medications in some other way were asked to specify the way they prefer. The categories pertaining to this open-ended question, along with the number of mentions for each, are listed in Table 8. A complete list of responses to this question is available in Appendix B.

Table 8. Categories of "Other" Preferred Disposal Method

	# mentions
Burn	6
Mix with undesirable substance and then throw in trash	3
Return to Physician/Doctor's office	6
Box at a public place such as the recycling center or grocery store	6
Not Sure	2
Never dispose of them	8

All respondents were then asked about sources for information to learn how and where to dispose of unused, unwanted, and expired medications. The majority (63%) preferred to receive information through traditional media advertising, such as television, newspaper, and magazines. A quarter of respondents would like to get information through local government and community groups, 23% preferred information via brochures or handouts, and 15% would like to receive their information from social media outlets. Approximately 9% of respondents think a webpage is the best way to get information and only 2% were not interested in disposing of medications (Figure 13).

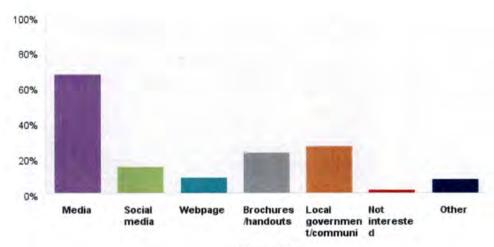


Figure 13.

What is the best way to get information to you about how and where to dispose of medications?

### **DEMOGRAPHICS**

Of the 780 respondents who answered the question about gender, 489 (62.69%) were female (Figure 14).

The majority of respondents are residents of Emmet County (32.57%); another 29.53% are residents of Charlevoix County; 18% of respondents reside in Antrim County as well as 18% from Cheboygan County (Figure 15). Respondents from outside Tip of the Mitt Watershed Council's 4-county service area included respondents from Kalkaska, Grand Traverse, and Alcona Counties.

786 respondents provided an age range, with over half in the age range of 60 and over (51.91%). A little over a third of respondents were between ages 41 and 59 (36%) and almost 12% were in the age range of 21-40. Only one respondent was under the age of 20 (Figure 16).

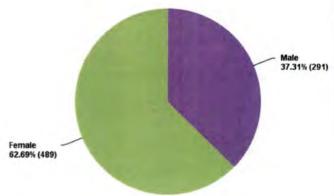


Figure 14. What is your gender?

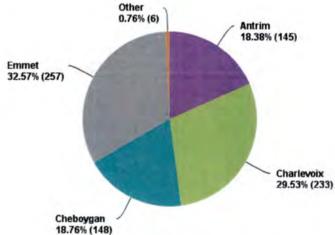
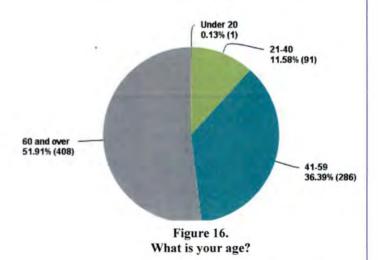


Figure 15.
What County do you reside?



### APPENDIX A: SURVEY QUESTIONNAIRE

	es any person or pet in your household use medications, including either prescription er-the counter?
	Yes
	No
2. Do	you currently have expired, leftover, or otherwise unwanted medications in your
home	[20] (Manual Caracata) [20] (Caracata) [20] (Caracata) [20] (Manual Caracata) [20] (Manual Caracatata) [20] (Manual Caraca
	Yes
0	No
0	Not sure
3. Wh	at is the most common reason that medications usually go unused in your household?
•	Medicines are expired
•	Change in prescription or dosage
	Advised to stop using by physician or veterinarian
•	Experienced an adverse reaction or side effect from the medication
•	Decided not to continue treatment
	Death
0	Other (please specify)
have	nat is the estimated amount of unused, unwanted, or expired medications that you disposed of in the past 12 months?  Less than 1 pound 1-5 pounds  Over 5 pounds
•	None
	w do you currently dispose of your unused, expired, or unwanted medications? Please e all that apply.
	Dispose of them in the sink/toilet
	Return to a Drug Enforcement Agency (DEA) National Take-Back Event
	Return to a POD community collection event
	Return to a POD permanent box at law enforcement offices
	Return to pharmacy
	Keep them in unlocked cabinets or storage
	Keep them in locked cabinets or storage
	Give them to a relative/friend
	I don't know how to dispose of them
	Other (please specify)

- Once a month or more
- Once every few years
- A few times a year
- Never
- Once a year
- 7. Recent studies have revealed that trace amounts of pharmaceuticals are present in surface, ground, and drinking water. How much do you feel this issue concerns you?
  - · I was not aware of this until right now, I am concerned
  - I was not aware of this until right now, I am NOT concerned
  - I was aware and am VERY concerned
  - I was aware and am SOMEWHAT concerned
  - This issue does not concern me
  - o Other (please specify)
- 8. In recent years, there has been an increase in home invasions and burglaries to pharmacies and veterinary offices by prescription drug seekers/abusers. How much do you feel this issue concerns you?
  - · I was not aware of this until right now, I am concerned
  - · I was not aware of this until right now, I am NOT concerned
  - · I was aware and am VERY concerned
  - · I was aware and am SOMEWHAT concerned
  - This issue does not concern me
  - Other (please specify)
- 9. In recent years, prescription drug abuse has become the fastest growing drug problem in the United States. Poisoning deaths, which include drug overdoses from prescription drugs, are now the leading cause of injury death in the U.S. How much do you feel this issue concerns you?
  - I was not aware of this until right now, I am concerned
  - · I was not aware of this until right now, I am NOT concerned
  - I was aware and am VERY concerned
  - I was aware and am SOMEWHAT concerned
  - This issue does not concern me
  - Other (please specify)
- 10. What are your top 2 concerns regarding improper disposal of medications?
  - · The medications will contaminate the water supply/environment
  - The medications will be stolen
  - The medications will be ingested by children or someone other than the person who was prescribed them
  - The medications will be abused by family/friend
  - · I have no concerns about my current disposal method
  - Other (please specify)

## 11. Are you aware of the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan?

- Yes
- · No, I am not aware
- · No. but I would like to learn more about it

## 12. Have you used the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan?

- Yes
- · No
- · No, but I will now
- · I have not before and I will probably not in the future

#### 13. If you have used the POD Program, what method of POD disposal did you use?

- · Community collection event
- · Permanent drop box at law enforcement office
- Both
- · I have not used the POD Program

## 14. How much time are you willing to spend traveling to properly dispose of your unused, expired, or unwanted medicines?

- 1-5 minutes
- 5-15 minutes
- 15-30 minutes
- · More than 30 minutes
- I would not be willing to travel
- Other (please specify)

## 15. What factors most impact your decision about how to dispose of or manage unused medicines in your household? (Select up to 3)

- Convenience/ease of disposal
- Cost
- · Desire to avoid risk of accidental poisoning
- Desire to avoid risk of drug misuse/abuse
- Desire to avoid contamination of water/environment
- o Lack of preferable options
- o I don't care
- Other (please specify)

## 16. What is your preferred method for disposal of unused, unwanted, or expired medications (Select all that apply; answers can be the same as your current method of disposal)

- · Permanent drop box at law enforcement office
- Community collection event
- Return to pharmacy

<ul> <li>Give to family member/friend</li> <li>Throw in the trash</li> <li>Dispose of down sink/toilet</li> <li>Mail back program</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>	•	Store in house for potential future use
<ul> <li>Dispose of down sink/toilet</li> <li>Mail back program</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>	•	Give to family member/friend
<ul> <li>Mail back program</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>		Throw in the trash
<ul> <li>Mail back program</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>	•	Dispose of down sink/toilet
I'm not interested in disposing of medications Other (please specify)  17. What is the best way to get information to you about how and where to dispose unused, unwanted, and expired medications?  Media advertising (ex. TV, newspaper, magazines) Social media (ex. Facebook, Twitter, Pinterest) Webpage Brochures/handouts Outreach through local government/community groups (ex. Newsletters, meeting community events) I'm not interested in disposing of medications Other (please specify)  18. What County do you reside? Antrim Cheboygan Charlevoix Emmet Other (please specify)  19. What is your age? Under 20 41-59 21-40 60 and over  20. What is your gender? Male Female  Comments:		At 1 to 7 to 1 to 1 to 1 to 1 to 1 to 1 t
<ul> <li>Other (please specify)</li></ul>	•	
<ul> <li>Media advertising (ex. TV, newspaper, magazines)</li> <li>Social media (ex. Facebook, Twitter, Pinterest)</li> <li>Webpage</li> <li>Brochures/handouts</li> <li>Outreach through local government/community groups (ex. Newsletters, meeting community events)</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li> <li>18. What County do you reside? <ul> <li>Antrim</li> <li>Cheboygan</li> <li>Charlevoix</li> <li>Emmet</li> <li>Other (please specify)</li> </ul> </li> <li>19. What is your age? <ul> <li>Under 20</li> <li>41-59</li> <li>21-40</li> <li>60 and over</li> </ul> </li> <li>20. What is your gender? <ul> <li>Male</li> <li>Female</li> </ul> </li> <li>Comments:</li> </ul>	•	
<ul> <li>Media advertising (ex. TV, newspaper, magazines)</li> <li>Social media (ex. Facebook, Twitter, Pinterest)</li> <li>Webpage</li> <li>Brochures/handouts</li> <li>Outreach through local government/community groups (ex. Newsletters, meeting community events)</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>		
<ul> <li>Social media (ex. Facebook, Twitter, Pinterest)</li> <li>Webpage</li> <li>Brochures/handouts</li> <li>Outreach through local government/community groups (ex. Newsletters, meeting community events)</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>	unuse	그녀의 사람이 하면 가게 무슨 그는 그리고 있다면 가게 되었다면 되었다.
<ul> <li>Webpage</li> <li>Brochures/handouts</li> <li>Outreach through local government/community groups (ex. Newsletters, meeting community events)</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li> <li>18. What County do you reside? <ul> <li>Antrim</li> <li>Cheboygan</li> <li>Charlevoix</li> <li>Emmet</li> <li>Other (please specify)</li> </ul> </li> <li>19. What is your age? <ul> <li>Under 20</li> <li>41-59</li> <li>21-40</li> <li>60 and over</li> </ul> </li> <li>20. What is your gender? <ul> <li>Male</li> <li>Female</li> </ul> </li> <li>Comments:</li> </ul>	•	
<ul> <li>Brochures/handouts</li> <li>Outreach through local government/community groups (ex. Newsletters, meeting community events)</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>	•	Social media (ex. Facebook, Twitter, Pinterest)
<ul> <li>Outreach through local government/community groups (ex. Newsletters, meeting community events)</li> <li>I'm not interested in disposing of medications</li> <li>Other (please specify)</li></ul>	•	Webpage
community events)  I'm not interested in disposing of medications  Other (please specify)  18. What County do you reside?  Antrim O Cheboygan Charlevoix O Emmet Other (please specify)  19. What is your age?  Under 20 41-59 21-40 60 and over  20. What is your gender?  Male Female  Comments:	•	Brochures/handouts
<ul> <li>Other (please specify)</li></ul>	•	Canada mineral second Section and Seconds (con the seconds) makes
<ul> <li>Other (please specify)</li></ul>	•	I'm not interested in disposing of medications
<ul> <li>Antrim</li></ul>	•	Other (please specify)
<ul> <li>Charlevoix ○ Emmet</li> <li>Other (please specify)</li></ul>	18. WI	hat County do you reside?
<ul> <li>Other (please specify)</li></ul>	•	Antrim O Cheboygan
19. What is your age?  • Under 20	•	Charlevoix o Emmet
<ul> <li>Under 20</li></ul>	•	Other (please specify)
21-40	19. WI	hat is your age?
21-40	•	Under 20 0 41-59
Male	•	21-40
Comments:	20. WI	hat is your gender?
	•	Male o Female
	Comm	ients:

#### APPENDIX B: OPEN-ENDED RESPONSES

#### 4. What is the most common reason that medications usually go unused in your household?

#### All of the above or multiple reasons (11 mentions)

- All
- · All of the above
- · All of the above
- All of the above
- Multiple
- · All of the above
- · All of the above
- All of the above
- All of the above
- · Change of dose and stopped taking too
- · Medicines are expired and change in prescription/dosage

#### Medications were "as needed" and they were no longer needed (21 mentions)

- No longer needed
- · They were "as needed"
- Pain relief after surgery
- · Used for conditions that come and go
- Get better
- Didn't need them for symptoms
- No longer needed
- Got better
- Didn't need any longer
- · Short term need only
- Don't need them anymore
- · Pain meds and didn't use them all
- PRN/Pain medications that don't get used
- · Don't need
- Use as needs only
- · Mostly "use as needed" otc medications
- Reason for use no longer exists
- Didn't need it all
- · Pain medication after surgery no longer needed
- Didn't need as much as was given (mainly pain related scripts)
- · I don't need as much

#### Do not use drugs or have any to dispose of (27 mentions)

- Don't have any
- None

- I have never had unused meds
- Have none
- None
- None
- None
- · Very seldom to medication
- None in the house for 8 years
- None in house
- N/A
- N/A
- None
- Don't
- Has never happened
- None
- Don't have any
- N/A
- Don't have any
- N/A
- Don't have any
- Does not
- · Don't typically have unwanted drugs
- · Hasn't happened in years
- None
- · No expired meds in household
- Use as needed/not needed

#### Given too many pills (5 mentions)

- More than prescribed in container
- · Leftover after recommended dosage taken
- Extra prescribed
- Purchase large bottles of OTC meds and don't use in time
- Sizes too large

#### All medications are used (14 mentions)

- None go unused
- None go unused
- · Usually don't have leftover
- · Use till gone
- · Not very often left
- I take all my medications
- No go unused
- I use my prescriptions up
- · They all get used
- Doesn't go unused

- · They don't go unused
- · We use what is prescribed
- · If prescribed, they are used
- · Not applicable all meds are used as directed

#### Uncategorized (12 mentions)

- · People come over to hang out and leave them
- Run out
- · Forgot about it
- · Dispose immediately
- Later use
- Don't know
- See #2
- New products or samples are available
- Allergy reaction
- Got better
- Saving for next time on chemo
- Veterinarian changes prescription

#### 6. How frequently do you dispose of medicines using one of the methods mentioned above?

#### Burn (10 mentions)

- Burn barrel
- Crush into powder and burn in burn barrel
- Burn
- Burn
- Incinerate
- · Burn in camp fire
- · Burn in fireplace
- · Burn with garbage
- Add to hot fire in wood stove
- · Burn with other trash

#### Don't know (1 mention)

Do not know how to dispose of them safely

#### Keep (6 mentions)

- · Holding on to them until they can be disposed of properly
- Still have in medicine cabinet
- · Used to take to biohazard bins at work, now I hold on to them
- Hold on to them until I can properly dispose of
- · Keep them

· Still have them

#### Mix with undesirable substance and then dispose of in trash (5 mentions)

- I was told (recycle center) to put in plastic container before throwing out
- Put in used cat litter
- · Wrap in coffee grounds and throw them in trash
- · Crush and throw outside
- Put in used coffee grounds and a plastic bag

#### Never have medications to dispose of (40 mentions)

- · Haven't had to dispose
- N/A
- No leftovers
- None to dispose of
- Don't have any
- Do not have any...
- None
- N/A
- Haven't disposed of any
- · Usually don't have
- Use until gone
- Don't have meds
- I use all medications
- Do not have any
- None in house
- Don't take much or hard drugs
- Use them
- · We have not thrown any medications away
- Use all
- There are none
- Don't have unused/unwanted meds
- I take all meds
- Don't
- · Don't need to
- Don't have any to dispose of
- We don't have any
- Never have any
- Don't have any
- · Have none to dispose of
- Don't need any
- Use them up
- · We generally use our drugs
- · Usually use up
- · Had none, but would use POD

- · Know of the DEA Take Back, but have not had to use yet
- Not applicable
- Not applicable all meds are used as directed
- · Never had any to dispose of
- · Have no expired meds in household
- Use until gone

#### Pharmacy (9 mentions)

- Take to Kens mkt in Indian River and put in Yellow Box
- Yellow jug = POD?
- Yellow Jug Old Drug Program
- Just learned I can return to our pharmacy
- If I had any, I would take to pharmacy
- Modern Pharmacy in Cheboygan
- · Yellow jug program
- All to Indian River pharmacy (Ken's Market)
- Modern Pharmacy (Cheboygan) takes expired meds all year long

#### Return to Physician/Doctor/Vet (8 mentions)

- · Return to physician
- Take back to veterinarian
- · Return to my doctor
- Return to vet
- Return to hospital
- · Give to doctor for foreign countries
- I'm a nurse practitioner, I can dispose at work
- Doctor office

#### Community program (POD or other) (7 mentions)

- Local recycle center
- Police
- County Hazardous Waste Event
- POD box if ever needed to
- I take them to the hazardous waste collection in Charlevoix Co.
- Keep until next community collection event
- Red Barrel project at sheriff's office

#### Sharps Box (2 mentions)

- Sharps box at work
- Sharps container

#### Trash (3 mentions)

- Used to throw in trash
- Old vitamins go in my compost

· Take to transfer station for landfill disposal

#### **Uncategorized (3 mentions)**

- Would take to appropriate disposal
- See #2 and #4
- · No children in household
- 7. Recent studies have revealed that trace amounts of pharmaceuticals are present in surface, ground, and drinking water. How much do you feel this issue concerns you?

I was aware and am a LITTLE concerned Water at my dad's seems to show effects and others close by are complaining! I just never thought about it ABX are a concern

8. In recent years, there has been an increase in home invasions and burglaries to pharmacies and veterinary offices by prescription drug seekers/abusers. How much do you feel this issue concerns you?

My daughter died as a result
We live in a fear based society...this is my major concern
Keep things in lock box which stays in a safe. I also don't let people know I take them.
I have no control over this
I get rid of any right away
I keep my medication in a locked cabinet
Do not make some dangerous drugs legal
Have security system
I have a gun

9. In recent years, prescription drug abuse has become the fastest growing drug problem in the United States. Poisoning deaths, which include drug overdoses from prescription drugs, are now the leading cause of injury death in the U.S. How much do you feel this issue concerns you?

My sister has had continuous toxic levels from doctors prescribing way over what should be taken.

Fear based society – the problem is not the drugs, but how we all actualize as human beings. It's sad

Not concerned for myself, but the people this impacts

I'm aware of this and it not only concerns me, it scares me!!

Very concerned, but now heroin is the biggest problem and theft to provide money to get it.

Doctors need to be controlled on who they give it to and how long

I feel for the people this has happened to.

Other member of family affected

#### 10. What are your top 2 concerns regarding improper disposal of medications?

Put in wood stove
All of the above
I feel Big Pharma is to Blame!
We as a society take way to many drugs...
Meds are wasted
I destroy the pills first
I'm careful, limit what I use, careful about storage
No young children in home
Assuming a sealed landfill

## 14. How much time are you willing to spend traveling to properly dispose of your unused, expired, or unwanted medicines?

#### Combine trip with other errands (15 mentions)

- · I just drop off at my pharmacy when I'm there
- I would combine a trip into Petoskey
- · Wouldn't make a special trip, just tie in with other errands
- Would take care of on trip taking anyway
- I combine trips
- At my convenience when I go to pharmacy
- · No extra time. I shop at Ken's Market.
- If I take to pharmacy, I can drop it anytime I am there
- I take them when I am doing other errands in town
- · Can be done when running other errands
- When I go to town
- When I have other errands so it is not a special trip
- We schedule to share other planned travel
- · I do when I'm in the area
- Combine meds drop-off w/other errands

#### Not an issue, live close to drop-off location (2 mentions)

- Not issue as I live close to drop off
- Sheriff dept. 2 miles away

#### Not applicable (7 mentions)

N/A

- N/A
- N/A
- Never any left
- Not really pertains to me
- · Don't have any
- · Non-issue for me

#### Whatever it takes (5 mentions)

- Would find a way!
- What it takes
- · Whatever is required
- Whatever is needed
- Whatever it takes

#### Uncategorized (9 mentions)

- Unsure
- · No
- · None, I flush them, have septic
- At the pharmacy
- Returned at my drug store
- My trip to the recycle center locally
- I don't know
- · My cousin is a pharmacist, I trust him
- No more than 1 hour

## 15. What factors most impact your decision about how to dispose of or manage unused medicines in your household? (Select up to 3)

#### Not applicable/Do not have any (7 mentions)

- N/A
- N/A
- None to dispose of
- Don't have any
- Don't have any
- Don't use medications
- I have not had any left over

#### **Uncategorized (5 mentions)**

- · Time and remembering
- Kids in house
- · Don't or can't use anymore
- · Lack of knowledge about good choices

· Haven't thought about it cause it has not been an issue

## 16. What is your preferred method for disposal of unused, unwanted, or expired medications (Select all that apply; answers can be the same as your current method of disposal)

#### Burn (6 mentions)

- · Put in wood stove
- Burn barrel
- Crushing into powder and burning
- Burn
- Burn in garage
- · Add to hot fire in wood stove

#### Not applicable/ Do not have any (8 mentions)

- It hasn't really been an issue as I have only a few partial containers of pet medication
- N/A
- Don't have any
- Don't have any
- Only have what is needed
- · Don't use medications
- · Not applicable, all meds are used as directed
- Use up as directed by physician

#### Mix with undesirable substance (3 mentions)

- Trash in wet coffee grounds
- Throw in trash in used coffee grounds
- Put in coffee grounds

#### Not Sure (2 mentions)

- Unsure
- Not sure

#### Pharmacy (3 mentions)

- Pharmacies should have a return program since they disperse there
- · Is pharmacy option currently available?
- Will pharmacy accept?

#### Recycling center/ Public Place (6 mentions)

- Recycle drop boxes outside pharmacy or public facility
- · Site that is available all the time
- Recycle center
- · Take to transfer station for landfill disposal

- · Have a drop box somewhere I go regularly like grocery store
- · Why not at Emmet Co Recycling?

#### Return to doctor/vet (6 mentions)

- · Have vet dispose of
- · Return to vet
- Physicians/vets should participate
- Yearly health physicals and give to physician office
- Return to vet
- Hospital or clinic

#### **Uncategorized (5 mentions)**

- Mom is EMT
- · Petoskey City Hall
- · Neutralizing agent
- · Safe and secure method and close by
- Sharps container

## 17. What is the best way to get information to you about how and where to dispose of unused, unwanted, and expired medications?

#### Email (12 mentions)

- Email
- · E-mail
- Email
- Email
- Email
- Email
- Email
- Email
- · Email and News Review Saturday Edition
- Email blast
- Email
- Email list

#### Mail (10 mentions)

- Mailing
- Direct mail
- By mail
- · This is fine
- Mail
- · Mailings such as this survey

- Local mail notice
- By mail
- US mail
- US mail

#### Public Radio (2 mentions)

- Public radio
- · Radio and evening news and this survey

#### Where drugs/prescriptions are obtained (11 mentions)

- Sign at pharmacy (Family Fair in Bellaire)
- · At doctor's offices
- · On medication label
- · Pharmacy drop-off
- · Include info with prescription
- By the drug store
- Pharmacy
- Posting at pharmacy
- Through medical center
- · Pharmacy and doctor offices
- I would love to see the pharmacies seeing the stuff hand out awareness pamphlets with the purchased drug

#### Do not want information (15 mentions)

- I'm using one currently
- N/A
- N/A
- None
- None
- I don't want info, I know now
- None
- N/A
- I know where to drop off
- Don't need information
- None
- None
- · No
- None
- None

#### Uncategorized (15 mentions)

- Chamber newsletter
- Notices thru schools
- · Phone call from me to recycling center or TOMWC

- · Brochures appropriate for elderly
- · Probably combination of all
- Petoskey News
- Not able to tell
- TV
- · Watershed Council webpage
- Don't know
- Pamphlets
- I don't watch much TV nor get the newspaper. I would need to see a statewide ad of some kind that runs often, given my viewing habits
- Senior Center
- I have and always will return to pharmacy
- Newspaper

#### 18. What County do you reside?

Co-reside between Emmet and Charlevoix Kalkaska Kalkaska Emmet and Cheboygan Grand Traverse Alcona

#### Comments:

#### Thank you or compliments (33 mentions)

- · Thanks for all you do!
- · Thank you for helping on this important issue
- Thank you for your work!
- · Thank you for your help in setting up the POD Program. It's great!
- · Thanx for your concerns on water quality in Northern Michigan
- Thank you
- · Thank you for asking!
- God Bless you! Thank you guys for all the awareness!
- Thank you for bringing this to our attention
- · Keep up the good work at protecting our precious water resources and environment
- · Thanks to collection sites and people that work them
- Thank you for having this available
- Thank you for conducting this survey very good work. I would clean the expired drugs from my refrigerator if this form would have included POD sites!

- Keep up the good work. Hope you receive many responses and more people will participate in the POD Program
- Thank you
- · Thank you for all you do
- Thank you, hopefully you can tell me where to dispose of old meds?
- · Thank you for providing this helpful service
- Thank you for this educational survey. Is it possible to take expired meds to pharmacy or use permanent drop boxes now?
- · Thank you for sending this out and making people more aware of proper medication
- Thank you for making me aware of this issue
- Keep up the good work! What is your position on "fracking" is it safe?
- · Keep up the good work you are doing
- Thank you for bringing this to my attention
- Thanks
- Thanks for doing this important awareness
- Drop boxes are a great service to our communities!
- I do not know if the drop box we use is part of the POD Program. It is located at our pharmacy. Thanks for your efforts to make people aware of these issues.
- Thank you for all you do
- Keep up the good work people need to know to protect us all.
- Thank you for helping to raise awareness of this important issue!
- No Thank you
- · Keep up the good work in prevention!

#### No (12 mentions)

#### Uncategorized (98 mentions)

- I have heard that it's not worth it to take the drugs that are not narcotics because they just get thrown in the regular trash anyway, is this true? Also, do the bottles get recycled?
- I really appreciate Modern Pharmacy and their program
- Disposal of unused drugs is extremely important
- I think having these drop offs at grocery stores would be easier. I don't like going into
  the sheriff office or county buildings and they are out of the way.
- Are POD and pharmacy disposal equivalent?
- Stop making so many dangerous drugs and giving them to people
- Many people I know are uneducated about this issue something needs to be done!
- I think that constant media attention to raise awareness and a variety of convenient return methods will do the trick.
- 1 am familiar with a POD site at the police state, but not the POD Program
- Need more info on recycling all materials, not just medicines
- I like the POD at the sheriff's office. I don't have the wait for a special collection.
- I take my prescribed meds until they are gone.
- Used drop-off in WA state. Got info at Walgreens re local participants
- We don't have any prescriptions that would be of interest to drug abusers.

- I was very pleased to learn recently that Gaylord Family Pharmacy participates with yellow jug. I was able to dispose of several unused prescriptions.
- I did not know there was anywhere in Northern Michigan to take unused medications. I
  would like to know where I can take them.
- I am an RN and have assisted at the events at McLaren Northern Michigan for Rx disposal.
- I only use over the counter medicines. More concern about my dogs Rxs.
- I have used this service @ previous home, new to Antrim County.
- I totally agree with your program and would like to see it instituted in the large resorts in our area.
- I care greatly about our watershed it's our most important resource.
- Ongoing collection is better than one-time events. Pharmacy or physician's office would be preferable.
- Saw your TV commercial and came to your site to find out where to take meds. I keep
  missing the I day events that happen once or twice a year. I have been saving old meds
  for a decade because I don't want to pollute. Thank you!
- · Also, I know some nursing homes dispose by flushing.
- Perseverance paid off in disposing a very large bag of husband's meds after he died: Rite
  Aid said the "pharmacy cannot accept it." Otsego sheriff dept. made us feel like it was too
  much of a bother to deal with. Finally Tuscarora Township police dept. accepted the
  drugs and were very courteous. Yes, we need a convenient and safe drop-off location.
- Info thru commission on aging mailings seniors have lots of meds! Do a lesson at school – kids do drawings of dangers of flushing in toilet. Fish with ears and display at grocery store.
- Your biggest obstacle to a rational drug safety program is the pharmaceutical industry itself.
- We have very few prescriptions and most of them are very docile.
- I do not trust any place to drop off meds.
- I have seen a box once in East Jordan police department but haven't used one before.
- Participated in a drop off 20 years ago or so, garbage disposal approx. every 5 yrs. since.
   Not sure if current POD Program.
- It is so easy to do! Two locations in town less than 5 mins. away. ©
- I have thought about unused prescriptions in the past.
- Just wondering how the Rx drug drop off disposal gets rid of the Rx drugs?
- . I do not want the st. of my town at all.
- I know there are drop-off sites, but they don't always coincide with my ability to clean out the cabinet. Need something that is available all the time, not just yearly.
- Just learned about POD program a short while ago at Pellston Public school event will
  use it soon.
- This has been a worthwhile and informative survey.
- My pharmacy has POD
- POD Program best idea for your Rx's to dispose of properly
- Please establish a drug drop-off. Transfer station? Or pharmacy in area?
- What about all the ice melt that goes into the lakes?

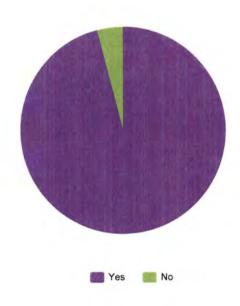
- I do not understand what possesses people to take prescription medications as a form of recreation!
- Phillip Seymour Hoffman died the day before I received this in the mail, interesting timing!
- Why would you use a POD?
- I'm concerned about how people dispose of all types of meds. It needs to get out there
  how bad it is for our environment and much more. You need to be responsible even when
  they expire!
- Make it easy to take to and let it know why it's bad by TV and computers for young people.
- It is important to dispose of medicine in the proper way.
- POD Box is often unavailable at E.J. Police Dept. because bldg. is locked. ☺
- · I knew there was a drop off, but didn't know where. Website helped. Teach the kids.
- The rise in copy is redickulous!
- I appreciate this opportunity.
- Don't make the disposal too difficult
- This applies to my husband and me. He's the only one taking prescription meds, but I
  would dispose of them.
- It would be helpful to have a drop box at the Eastport Market or the Post Office
- We check all drugs periodically to dispose of any old or unused meds otc or rx
- Take what you're prescribed until it's gone!!
- Many people are not aware that we have a water contamination problem. More media?
- It was surprising to me how few people understood the problem and the existing POD program.
- Glad you are spreading the word about how to dispose properly. I know pharmacies do
  not want to bear the burden of this process but they are source that immediately comes to
  mind. Pick up pills and drop them off at the same place. Makes most sense and keeps it
  simple for consumer.
- I only take an allergy pill so there is not to throw away ever.
- All drugs are locked in a compartment.
- There should be a prescription drop-off site at every pharmacy.
- · We try not to have any unused medication around.
- I think more advertising needs to be done about POD. I know more about the yellow jug program than POD and they are out of another state!
- Additional signage showing where drop off points are while in the area.
- I tried to use Survey Monkey, but didn't appreciate the format and the time I wasted.
- People that take illegal drugs give them more to get rid of them
- Need PODs in pharmacies also!
- I support proper disposal of drugs
- Have a POD where you purchase the drugs
- I feel this should be advertised in every way for the safety of everything and everyone.
- Been watching that there are no leftovers
- Where are the drop-off sites?

- · Very lucky health-wise and not on any medications.
- I am so glad people are now being aware of what drugs can do to our drinking water
- I feel a lot of people don't know about this keep getting the info out there. Good work!
- Do NOT give my personal info to any other business or organization.
- Finally! We need to get on board. Friends of Boyne River has tried since 2005, but not enough.
- We don't use many prescription drugs and when we do, we complete the prescription.
- · Let me know of the nearest drop point.
- Our meds are usually expired over the counter. Our veterinary hospital accepts meds, not expired, from deceased pets for a free drawer for owners without money.
- I have recommended the drop box to others.
- · I enjoyed filling this out.
- We very rarely have to dispose of any medications.
- We rarely use prescription drugs so it has not been an issue in our household.
- More people will use it if they know about it. I tell all my friends and relatives about the program.
- Am aware there is a program, but do not know the drop off location.
- I learned of the POD Program via a poster at the K-Mart pharmacy counter. I think it
  would be most convenient to use pharmacies for return/disposal of unused prescriptions
  and OTC drugs purchased there.
- It is wonderful for only meds to be taken by who they were prescribed for and when not need to be able to dispose of safely.
- · Only my husband is on prescription meds.
- Rare use of medications in our household, but aware this issue is a concern for the community.
- Too many drugs prescribed and the improper disposal of them.
- · I fully support proper disposal and encourage continuation of adequate disposal sites.
- How does the POD program dispose of the meds. If they go to a landfill in any way, that
  is not doing its job. Final disposal is my biggest concern in this program.
- I realize this is a problem. It needs media attention and easy disposal solutions.

### APPENDIX C: FIGURES AND SUMMARY DATA

Northern Michigan POD Program Survey

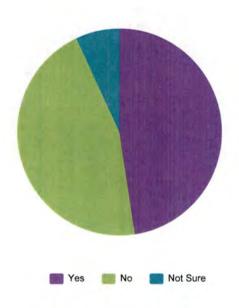
# Q2 Does any person or pet in your household use medications, including either prescription or over-the counter?



Answer Choices	Responses	
Yes	95.94%	757
No	4.06%	32
otal		789

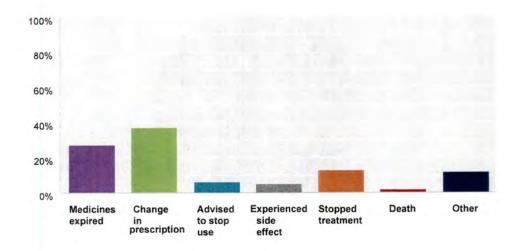
#### Northern Michigan POD Program Survey

# Q3 Do you currently have expired, leftover, or otherwise unwanted medications in your home?



Answer Choices	Responses	
Yes	47.53%	375
No	45.50%	359
Not Sure	6.97%	55
otal		789

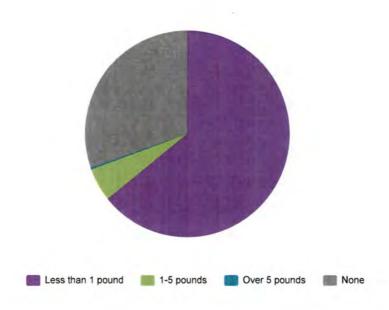
# Q4 What is the most common reason that medications usually go unused in your household?



nswer Choices	Responses	
Medicines expired	26.87%	212
Change in prescription	36.88%	29
Advised to stop use	5.96%	47
Experienced side effect	5.07%	40
Stopped treatment	12.55%	99
Death	1.27%	10
Other	11.41%	90
tal		789

# Q5 What is the estimated amount of unused, unwanted, or expired medications that you have disposed of in the past 12 months?

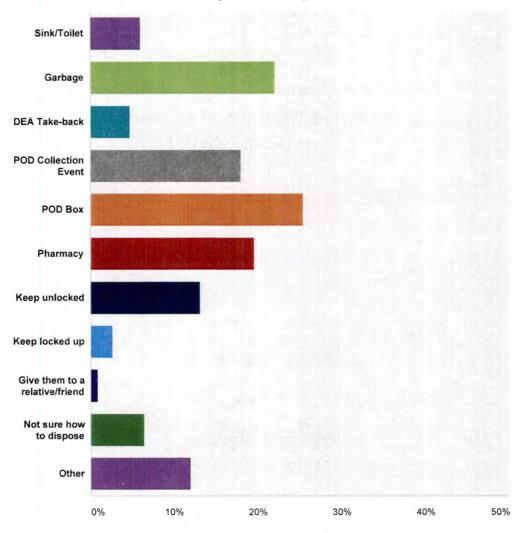
Answered: 789 Skipped: 0



nswer Choices	Responses	
Less than 1 pound	64.13%	506
1-5 pounds	5.20%	41
Over 5 pounds	0.25%	2
None	30.42%	240
otal		789

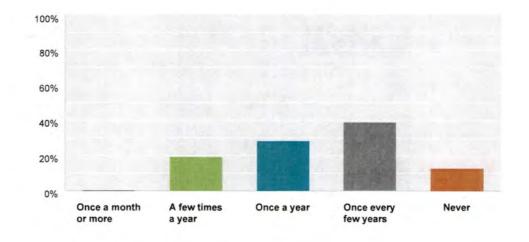
## Q6 How do you currently dispose of your unused, expired, or unwanted medications? Please choose all that apply.

#### Northern Michigan POD Program Survey



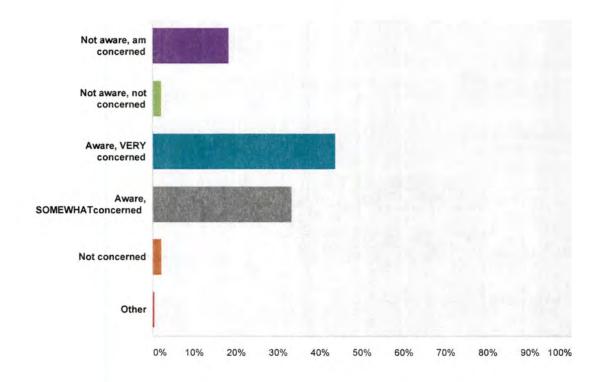
nswer Choices	Responses	
Sink/Toilet	5.96%	4
Garbage	22.05%	17-
DEA Take-back	4.69%	3
POD Collection Event	18.00%	14
POD Box	25.35%	20
Pharmacy	19.52%	15
Keep unlocked	13.05%	10
Keep locked up	2.66%	2
Give them to a relative/friend	0.89%	
Not sure how to dispose	6.34%	5
Other	11.91%	g
otal Respondents: 789		

# Q7 How frequently do you dispose of medicines using one of the methods mentioned above?



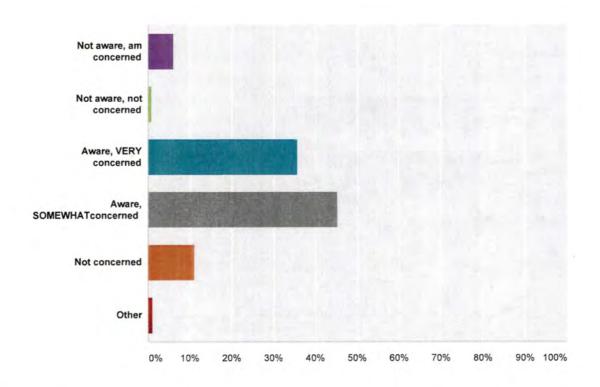
Answer Choices	Responses	
Once a month or more	0.51%	4
A few times a year	19.26%	152
Once a year	28.39%	224
Once every few years	38.91%	307
Never	12.93%	102
Total		789

#### Q8 Recent studies have revealed that trace amounts of pharmaceuticals are present in surface, ground, and drinking water. How much do you feel this issue concerns you?



swer Choices	Responses	
Not aware, am concerned	18.25%	144
Not aware, not concerned	2.15%	17
Aware, VERY concerned	43.73%	345
Aware, SOMEWHAT concerned	33.21%	262
Not concerned	2.15%	17
Other	0.51%	4
tal	A CHELLINE	789

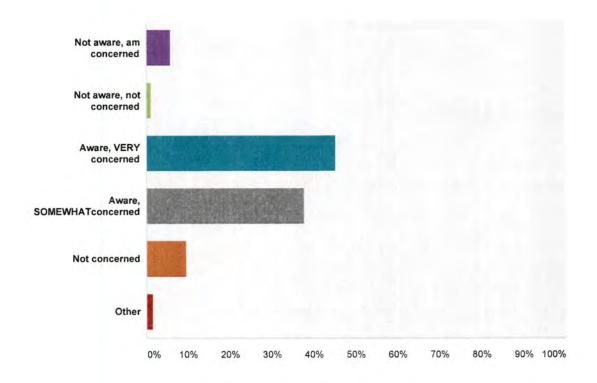
Q9 In recent years, there has been an increase in home invasions and burglaries to pharmacies and veterinary offices by prescription drug seekers/abusers. How much do you feel this issue concerns you?



swer Choices	Responses	
Not aware, am concerned	5.96%	47
Not aware, not concerned	0.76%	6
Aware, VERY concerned	35.61%	281
Aware, SOMEWHAT concerned	45.37%	358
Not concerned	11.15%	88
Other	1.14%	9
tal		789

Q10 In recent years, prescription drug abuse has become the fastest growing drug problem in the United States. Poisoning deaths, which include drug overdoses from prescription drugs, are now the leading cause of injury death in the U.S. How much do you feel this issue concerns you?

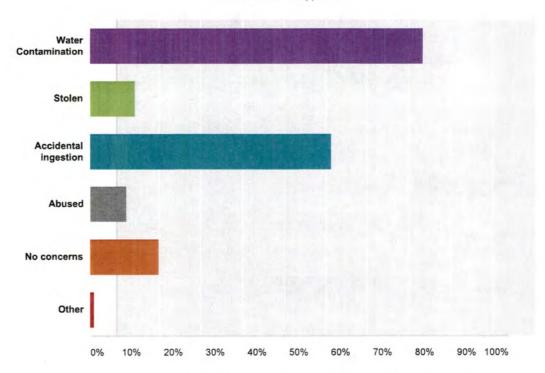




nswer Choices	Responses	
Not aware, am concerned	5.58%	44
Not aware, not concerned	1.01%	8
Aware, VERY concerned	44.99%	355
Aware, SOMEWHAT concerned	37.64%	297
Not concerned	9.38%	74
Other	1.39%	11
otal		789

## Q11 What are your top 2 concerns regarding improper disposal of medications?

Answered: 789 Skipped: 0

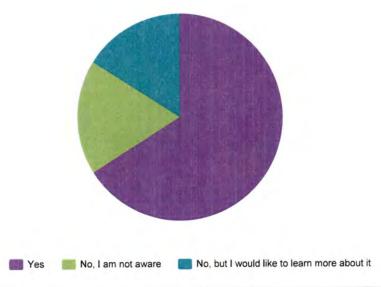


nswer Choices	Responses	
Water Contamination	79.72%	629
Stolen	10.77%	85
Accidental ingestion	57.92%	457
Abused	8.75%	69
No concerns	16.48%	130
Other	1.14%	9
otal Respondents: 789		

## Northern Michigan POD Program Survey

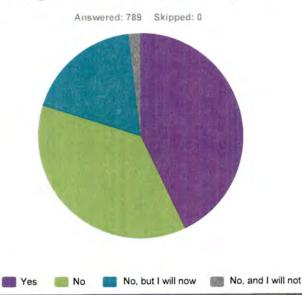
## Q12 Are you aware of the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan?





nswer Choices	Responses	
Yes	66.03%	521
No, I am not aware	18.00%	142
No, but I would like to learn more about it	15.97%	126
otal		789

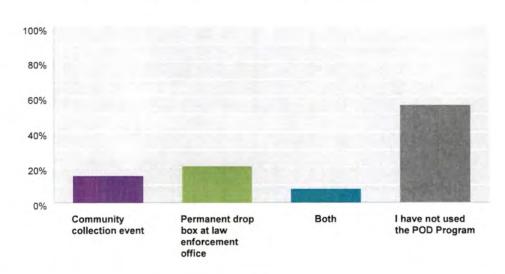
## Q13 Have you used the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan?



Answer Choices	Responses	
Yes	42.97%	339
No	36.88%	291
No, but I will now	18.38%	145
No and I will not	1.77%	14
<b>Fotal</b>		789

## Q14 If you have used the POD Program, what method of POD disposal did you use?

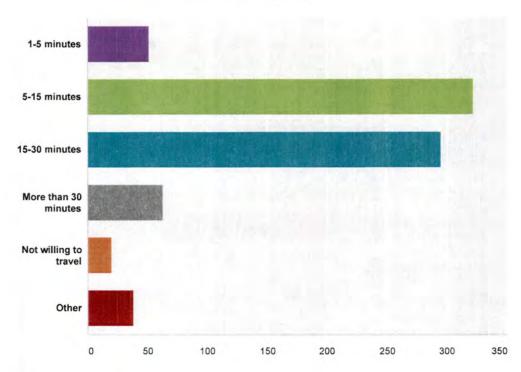
Answered: 789 Skipped: 0



Answer Choices	Responses	
Community collection event	15.46%	122
Permanent drop box at law enforcement office	21.04%	166
Both	7.98%	63
I have not used the POD Program	55.51%	438
otal		789

## Q15 How much time are you willing to spend traveling to properly dispose of your unused, expired, or unwanted medicines?

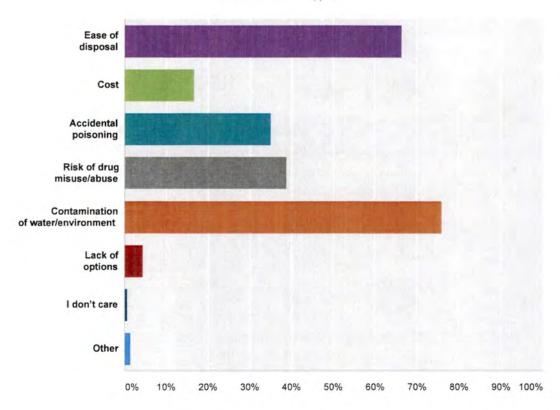




Answer Choices	Responses	
1-5 minutes	6.46%	51
5-15 minutes	40.81%	322
15-30 minutes	37.39%	295
More than 30 minutes	7.98%	63
Not willing to travel	2.53%	20
Other	4.82%	38
otal		789

# Q16 What factors most impact your decision about how to dispose of or manage unused medicines in your household? (Select up to 3)

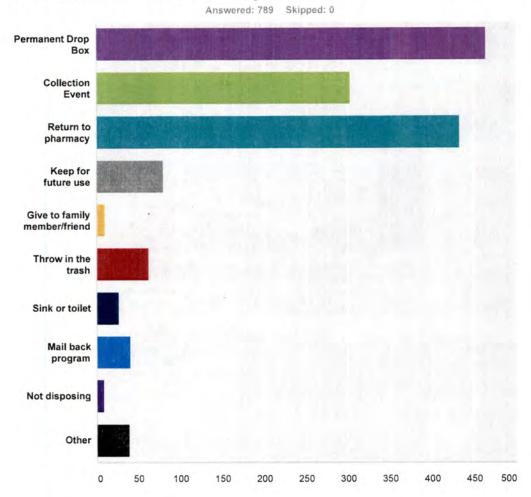




answer Choices	Responses	
Ease of disposal	66.41%	524
Cost	16.60%	131
Accidental poisoning	35.11%	277
Risk of drug misuse/abuse	38.91%	307
Contamination of water/environment	75.92%	599
Lack of options	4.31%	34
I don't care	0.63%	
Other	1.52%	12
otal Respondents: 789		

## Northern Michigan POD Program Survey

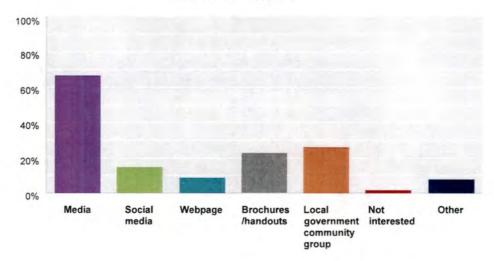
# Q17 What is your preferred method for disposal of unused, unwanted, or expired medications (Select all that apply; answers can be the same as your current method of disposal)



swer Choices	Responses	
Permanent Drop Box	58.81%	46-
Collection Event	38.40%	30
Return to pharmacy	54.88%	43
Keep for future use	10.01%	7
Give to family member/friend	1.14%	
Throw in the trash	7.86%	6
Sink or toilet	3.30%	2
Mail back program	5.07%	4
Not disposing	1.01%	
Other	4.94%	3
otal Respondents: 789		

# Q18 What is the best way to get information to you about how and where to dispose of unused, unwanted, and expired medications?



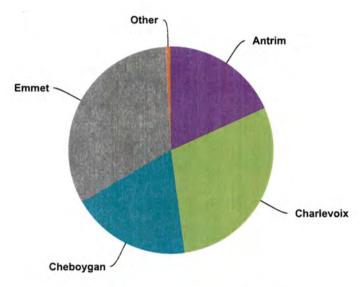


Answer Choices	Responses	
Media	66.92%	528
Social media	15.08%	119
Webpage	9.00%	71
Brochures/handouts	23.07%	182
Local government/community groups	26.36%	208
Not interested	1.90%	15
Other	8.24%	65
otal Respondents: 789		

## Northern Michigan POD Program Survey

## Q19 What County do you reside?

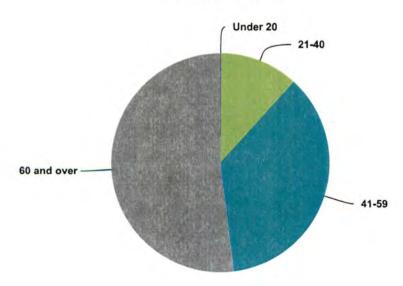
Answered: 789 Skipped: 0



nswer Choices	Responses	
Antrim	18.38%	145
Charlevoix	29.53%	233
Cheboygan	18.76%	148
Emmet	32.57%	257
Other	0.76%	6
otal		789

## Q20 What is your age?

Answered: 786 Skipped: 3

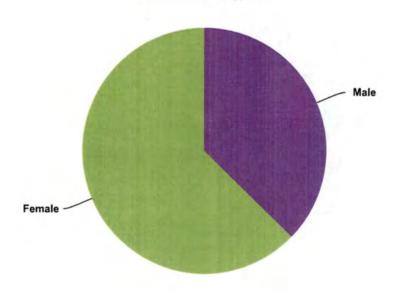


## Northern Michigan POD Program Survey

Answer Choices	Responses	
Under 20	0.13%	1
21-40	11.58%	91
41-59	36.39%	286
60 and over	51.91%	408
Total		786

## Q21 What is your gender?

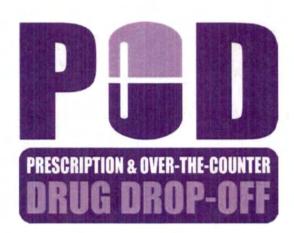




Answer Choices	Responses	
Male	37.31%	291
Female	62.69%	489
Total		780

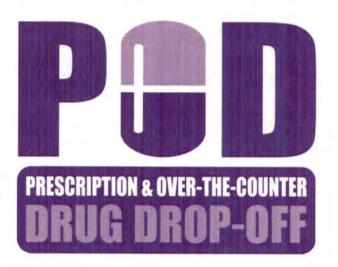
## Q22 Do you have any other comments, questions, or concerns?

Answered: 143 Skipped: 646



# EXPANDING NORTHERN MICHIGAN'S PRESCRIPTION AND OVER-THE-COUNTER DRUG DROP-OFF PROGRAM

Evaluating the Success of an Education and Media Campaign





Tip of the Mitt Watershed Council

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Tip of the Mitt Watershed Council completed this survey and report with funding from the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program. Tip of the Mitt Watershed Council maintained editorial control and the conclusions expressed here are those of the author.

December 2015

## KEY FINDINGS

- A significant majority of households (88%) are aware of the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan.
- Community awareness of the POD Program increased from 66% to 88% in less than 2 years. This is directly attributable to the extensive education and outreach and media work that was conducted as part of the Michigan Department of Environmental Quality Pollution Prevention grant.
- Television proved to be the most successful method to reach the Northern Michigan community. Almost 50% of households learned about the POD Program from television commercials. The other primary ways citizens heard of the program were word of mouth (27%), newspapers (20 %), and from community organizations (16%).
- Over 3/4 of respondents (84%) believe the POD Program has been highly successful at raising awareness about how and where to dispose of unwanted, unused, and expired medications.
- Two-thirds of households either use the POD Program for disposal or do not have any medications to dispose of.
- Use of permanent POD boxes substantially increased during the last two years. Sixty-seven (67) percent of respondents used the permanent drop boxes located at law enforcement offices for disposal in 2015 as opposed to only 21% previously.



Demonstration of how to use the POD Box. Photo: Tip of the Mitt Watershed Council

## BACKGROUND

Since 2008, Tip of the Mitt Watershed Council has been working as a key partner in the development and expansion of the Prescription and Over-the-Counter Drug Drop-Off Program or POD Program. The POD Program is a multicounty-wide medication drug take-back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties and over 20 permanent collection drop-off boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter medicines, and personal care products for free.

In an effort to increase awareness and use of the program, Tip of the Mitt Watershed Council obtained a grant from the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program to conduct an education and outreach and media campaign during 2014-2015. As part of the project, Tip of the Mitt Watershed Council surveyed local residents from the four counties of Antrim, Charlevoix, Cheboygan, and Emmet to gather information on medication disposal in Northern Michigan.

An initial survey was sent to 20,000 randomly selected households in Northern Michigan on January 31, 2014, prior to implementation of the education and media campaign. The purpose was to study the ways in which residents of Northern Michigan dispose of their prescription and nonprescription medicines once they are done with them. Results of surveys were analyzed and compiled into a report, *Understanding Medicine Disposal in Northern Michigan*.

The second survey was mailed in September of 2015, again to 20,000 randomly selected households within the four counties of Antrim, Charlevoix, Cheboygan, and Emmet. In particular, this survey looked at community awareness and use of the POD Program to determine if activities undertaken during the two year grant period enhanced the POD program. This report describes the findings from the survey conducted during the last quarter of the grant period. Additionally, the report contains a comparison of information on disposal behaviors obtained through an initial survey and this follow-up survey to evaluate the success of the education and outreach and media campaign for the POD Program in Northern Michigan.

## SURVEY METHODOLOGY

Tip of the Mitt Watershed Council conducted a random mail survey of 20,000 households in the Watershed Council's service area – the watersheds within the counties of Antrim, Charlevoix, Cheboygan, and Emmet. The survey was conducted as part of a grant project funded by the Community Pollution Prevention Grant Program, Michigan Department of Environmental Quality. The purpose was to gather information on drug disposal behaviors of Northern Michigan residents to help gauge the awareness and use of the Northern Michigan Prescription and Over-the-Counter Drug Disposal (POD) Program to evaluate the success of recent education and outreach efforts.



A mailing list was obtained from Redi-Data, a database management company, which compiles data using 29 billion records from over 100 different sources to aggregate a consumer database every year. Raw data is gathered from real estate and tax assessments, voter registration files, utility connects, bill processors, behavioral data, and other sources before integrating dozens of proprietary enrichment sources. Five thousand names were randomly selected for each of the

four counties and the surveys were mailed via the U.S. Postal Service between September 18<sup>th</sup> and September 23<sup>rd</sup>, 2015. We also recreated the survey using SurveyMonkey to allow respondents to fill the survey out online.

In attempt to increase the response rate for the survey, those individuals who fully completed the survey were eligible to be entered into a drawing to win one of four prizes generously donated by local businesses. The deadline for returned surveys to be entered into the drawing was October 15, 2015, for a total data collection period of approximately four weeks. However, additional completed surveys were returned after the October 15, 2015 deadline. In total, 1,434 surveys were completed out of a starting sample of 20,000, for a response rate of 7%. Of the 1,434 surveys, 1,417 were complete. Seventeen were not complete and, therefore, unable to be included in the analysis.

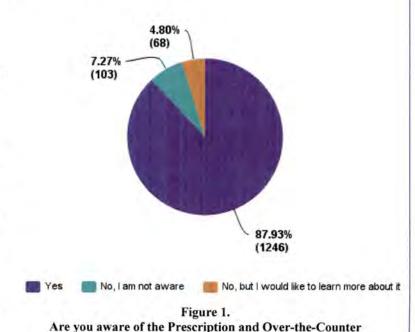
The questionnaire used for this study (see Appendix A) contained closed-ended questions, including those with yes/no responses and those with multiple response options. In addition, the questionnaire included many other-specify options. Other-specify questions are generally the last option in a multiple response option question and provide respondents with the opportunity to answer a question with a response not listed in the set of responses.

Throughout the report, the results of the yes/no and multiple response option questions are presented as tables or figures. Open ended responses and open comments are provided in Appendix B. A full summary of the data is available in Appendix C.

## AWARENESS OF THE POD PROGRAM

The vast majority of households that responded, approximately 88%, are aware of Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program, as shown in Figure 1. Sixty-six (66) percent of respondents were aware of the POD Program in the initial 2014 survey. As a result, there was a significant increase in awareness (22%) that can be directly attributed to the education and outreach and media work conducted as part of the grant project.

When asked how they heard about the POD Program, almost half of respondents, 49%, indicated through the television commercials.



Drug Drop-off Program in Northern Michigan?

Word of mouth and newspapers were the next most common methods for people to hear about the POD program, with 27% and 20% respectively. Of the newspapers, the greatest percentage, 30%, learned about the POD program in the Petoskey News Review. Eight (8) percent heard about the program in the Cheboygan Tribune and 3% from the Traverse City Record Eagle. Another 7% of respondents indicated learning about the POD Program from smaller newspapers throughout Northern Michigan, including the Antrim County News, Boyne Gazette, Charlevoix Courier, Elk Rapids News, Harbor Light, and Straitsland Resorter. Just over 16% of households learned about the POD Program from community organizations and approximately 16 % had seen the information in flyers or publications. (Figure 2)

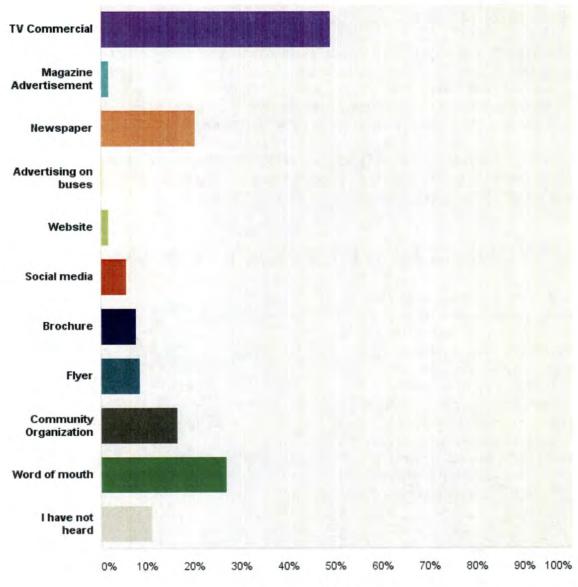


Figure 2. How did you hear about the POD Program?

Those who reported that they heard of the POD Program by another method were asked to specify what the source was. The table below presents the categories under "other" for which the responses were classified and the corresponding count of the number of responses per category. For a complete list of responses to this question, see Appendix B.

Table 1. Categories of "Other" Ways Respondents Heard of the POD Program

	# mentions	
Hospital/Doctor	22	
Pharmacy	43	
Saw a Permanent Box	42	
Other (Radio, Work, etc.)	63	

When asked if the POD Program has raised awareness about how and where to properly dispose of unwanted, unused, and expired medications, almost 84% agreed. Less than 1% disagreed and the remaining neither agreed nor disagreed (5%) or were not familiar with the POD Program (10%), as shown in Figure 3. Therefore, the education, outreach, and media efforts through the MDEQ grant were highly successful at achieving the intended goal of educating the Northern Michigan community about proper medication disposal.

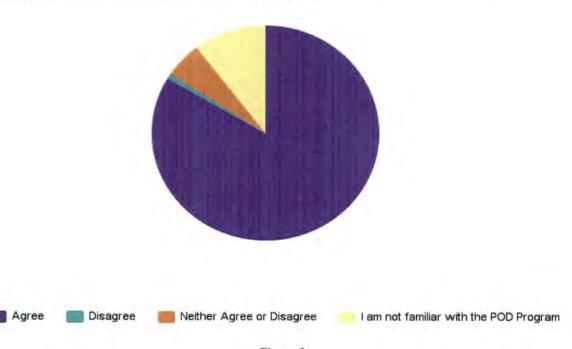


Figure 3.

The POD Program has raised my awareness about how and where to properly dispose of unwanted, unused, or expired medications?

## **USE OF POD PROGRAM**

In the past twelve months, over 41% of respondents disposed of unwanted or expired medications through the POD Program (Figure 4). This is similar to the response from the 2014 initial survey, in which 43% indicated they had used the POD Program in Northern Michigan.

Of the 41% who used the POD
Program recently, the majority
disposed of medicines at a
permanent drop-off box at law
enforcement (67%), while approximately
20% participated in community collection
events. Thirteen (13) percent of respondents
had used both POD disposal methods in the
last 12 months. The use of permanent POD
boxes significantly increased during the
two-year period from 21% to 67%.

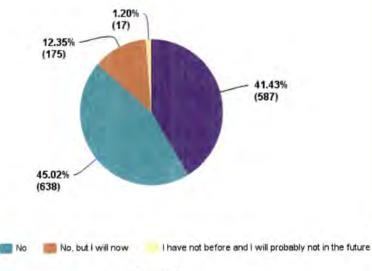


Figure 4.

Have you used the POD Program in Northern
Michigan in the past 12 months?

Awareness levels increased for all counties, with the greatest increase in awareness occurring with residents from Antrim County. In 2014, 60% of respondents from Antrim County indicated they were aware of the POD Program, whereas in the 2015 survey, approximately 86% were aware. Awareness by households within Charlevoix County increased from 66% to 90% and from 65% to 86% in Cheboygan County. Emmet County experienced the least increase in awareness, however it still increased from 72% in 2014 to 90% in 2015.

As was the result in the initial survey, residents from Emmet and Charlevoix Counties are more likely to use the POD Program, as opposed to respondents from Antrim and Cheboygan Counties who were more likely to return unwanted or expired medications to a pharmacy. Emmet County offers the most POD disposal options with more permanent drop-off boxes and more collection events available than the other counties, which could explain why use of the POD Program is greater in Emmet County.

When asked what factors made respondents use the POD Program to dispose of unwanted or unused medications, 28% of households indicated because it is the most convenient method and 20% felt more comfortable using law enforcement agencies for disposal. Sixteen (16) percent of respondents like the privacy provided by the POD Program and 6% are not aware of any other disposal methods, as shown in Figure 5 below.

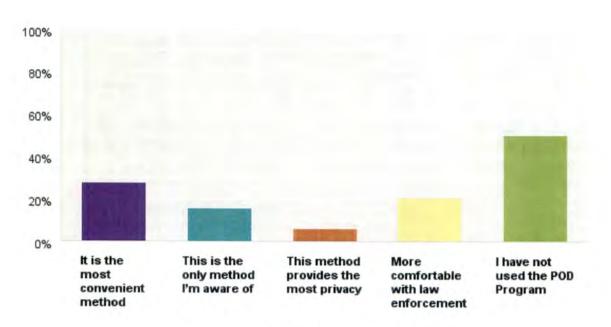


Figure 5.
What factors made you use the POD Program?

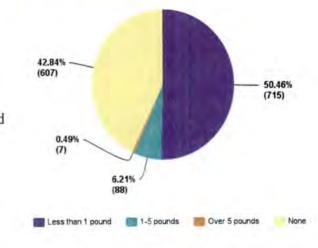
Those who reported that there were other factors that made them use the POD Program were asked to specify what those factors were. Two individuals specified what about the current POD Program was convenient which included the ability to stay in one's car and twenty-four hour, seven days a week availability. The other primary categories pertaining to this open-ended question, along with the number of mentions for each, are listed in Table 2.

Table 2. Categories of "Other" Factors That Influence Use of POD Program

	# mentions	
Environmental concerns	41	
Public safety concerns (theft/abuse)	10	
Use other disposal method	6	
Proper disposal is the right thing to do	6	

## MEDICINE DISPOSAL BEHAVIORS

Households were asked to estimate the amount of unused, unwanted, or expired medications that have been disposed of in the past 12 months. The vast majority of households disposed of little to no medications. As seen in Figure 6, 51%, disposed of less than one pound and 43% did not dispose of any medications last year. Only 6% of respondents disposed of between 1-5 pounds and 7 households, representing less than 1% of respondents, disposed of more than 5 pounds of medications during the last 12 months.



These results are similar to those from the initial survey, although there is small increase in the percentage of individuals not disposing of any

Figure 6.

What is the estimated amount of unused, unwanted, or expired medications that you have disposed of in the past 12 months?

medications. This could be due to households utilizing the POD Program in the last few years and, subsequently, not currently having any unused or expired medications to dispose of. This would correlate with the responses pertaining to frequency of medication disposal where the largest percentage of respondents only dispose of medications once every few years.

Respondents were asked how frequently they dispose of unused, unwanted, or expired medications. Over half indicate they either never dispose of medications (25%) or do so only once every few years (33%). This can help explain why a majority of respondents did not use the POD Program in the past 12 months, despite the increased awareness. Twenty-two (22) percent dispose of medications once a year and another 18.5% get rid of unwanted medications a few times a year. Only 1% of responding households dispose of medications once a month or more. (Figure 7)

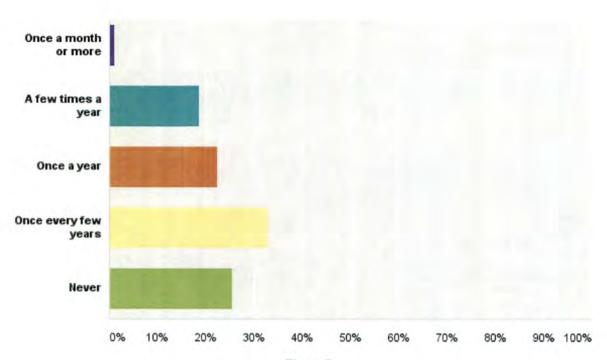


Figure 7.

How frequently do you dispose of unused, unwanted, or expired medicines?

In addition to volume and frequency of medication disposal, individuals were asked to identify how they currently dispose of unused, expired, or unwanted medications if they have not used the POD Program. Over half did not use any other method as they do not have any unused or expired medications to dispose of. About 17% of respondents kept medications in their homes. Of those, only 5% kept them locked in cabinets or storage. The remaining 12% keep medicines unlocked. Fifteen (15) percent return unused drugs to pharmacies, approximately 14% throw unwanted medications into the household garage, and almost 4% burn them. Four (4) percent of respondents still dispose of medications in the sink or toilet, which is down 2% from the initial survey, and 6% reported that they don't know how to dispose of unwanted or expired medications. (Figure 8)

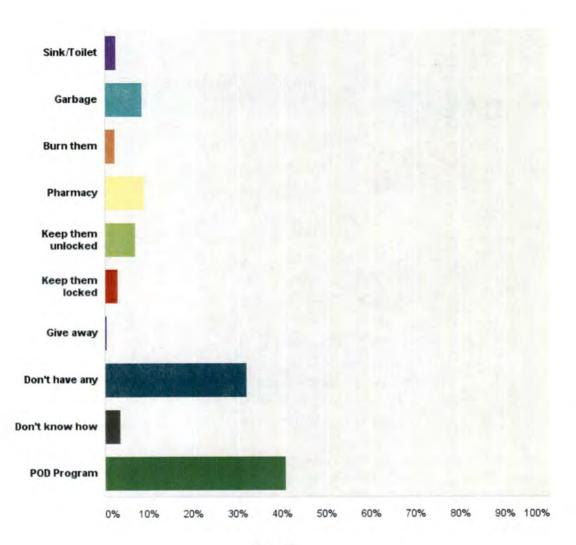


Figure 8.

If you have not used the POD Program, how do you currently dispose of unused, expired, or unwanted medications?

Some respondents provided other answers for how they currently dispose of unwanted, unused, or expired pharmaceuticals and personal care products. Of those responses, 16% return medications to their doctor or veterinarian and 8% use recommendations of the SMARxT DISPOSAL campaign, created by the U.S. Fish and Wildlife Service, the American Pharmacists Association, and the Pharmaceutical Research and Manufacturers of America, to make medications less appealing (mix with kitty litter, coffee grounds, etc.) and throw away in the trash. Eight (8) percent of households are currently saving medications for future disposal and 4% of households reported using the Yellow Jug, Old Drugs Program.

All respondents were then asked what is the best way to get information about how and where to dispose of unused, unwanted, and expired medications. The majority (68%) preferred to receive information through traditional media advertising, such as television, newspaper, and magazines. As seen in Figure 10, approximately 17% of respondents would like to get information through local government and community groups, 16% preferred information via brochures or handouts, and 13% would like to receive their information from social media outlets. Approximately 5% of respondents think a webpage is the best way to get information and 4% were not interested in disposing of medications, although many noted it was because they were already aware of how to dispose of medications properly or they do not have medications and a need for disposal.

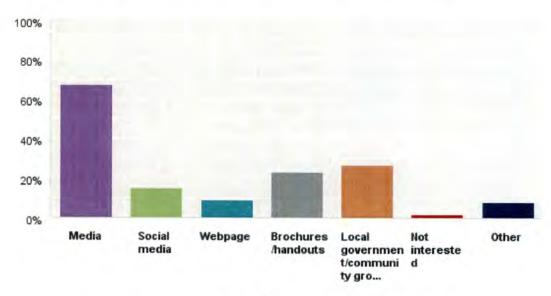


Figure 10.

What is the best way to get information to you about how and where to dispose of medications?

Those who reported other ways as the best to obtain information on medication disposal were asked to specify. The other primary categories pertaining to this open-ended question, along with the number of mentions for each, are listed in Table 3. Complete list of responses is available in Appendix B.

Table 3. Categories of "Other" Factors That Influence Use of POD Program

	# mentions
Direct Mail/Email	23
Public Places (pharmacies, grocery stores)	17
Doctors office/Hospital	9
With Prescriptions	6
All of the Above	11

## **DEMOGRAPHICS**

Of the 1,297 respondents who answered the question about gender, 761 (59%) were female and 536 (41) were male. (Figure 14).

The majority of respondents are residents of Emmet County (28.46%); another 26.59% are residents of Charlevoix County; 22.5% of respondents reside in Antrim County as well as 22.5% from Cheboygan County (Figure 15). There were more respondents from Cheboygan and Antrim County this time than the initial survey in January 2014. As a result, there is a more even distribution and representation from all of the counties. Respondents from outside Tip of the

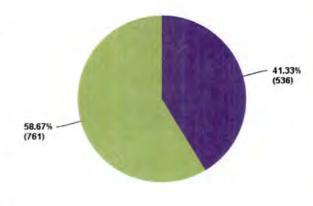
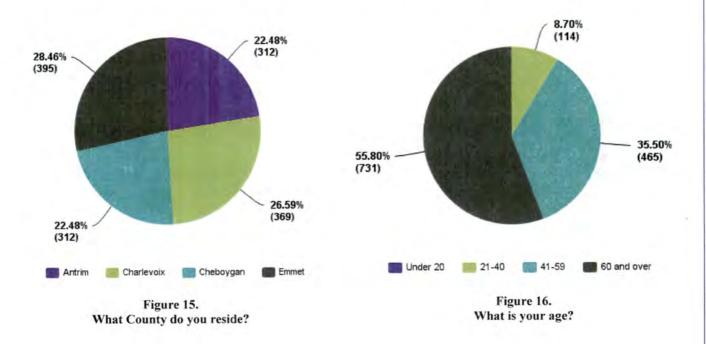


Figure 14. What is your gender?

Mitt Watershed Council's service area included respondents from Benton, Grand Traverse, Kalkaska, Otsego, Tuscola, and Wexford Counties.

One thousand three hundred and ten (1,310) respondents provided an age range, with over half in the age range of 60 and over (55.80%). A little over a third of respondents were between ages 41 and 59 (36%) and almost 9% were in the age range of 21-40. No respondents were under the age of 20 (Figure 16). The percentages for both gender and age were quite similar in both surveys.



## APPENDIX A: SURVEY QUESTIONNAIRE

1	. Are you aware of the Prescription	and	Over-the-Counter I	Drug	Drop-off	(POD)	Program
ii	Northern Michigan?			900			

- o Yes
- o No. I am not aware
- o No, but I would like to learn more about it

## 2. How did you hear about the POD Program? (Select all that apply)

- o Television Commercial
- o Magazine advertisement (please specific below, if possible)
- Newspaper (please specific below, if possible)
- o Advertising on buses
- o Website
- o Social Media
- o Brochure
- o Flyer
- Community organization (ex. newletters, meetings, presentations)
- Word of mouth
- o I have not heard of the POD Program
- Other (please specify)

## 3. The POD Program has raised my awareness about how and where to properly dispose of unwanted, unused, or expired medications.

- o Agree
- o Disagree
- Neither Agree or Disagree
- o I am not familiar with the POD Program

## 4. Have you used the POD Program in Northern Michigan in the past 12 months?

- o Yes
- o No
- o No. but I will now
- o I have not before and I will probably not in the future

## 5. If you have used the POD Program, what method of POD disposal did you use?

- o Community collection event
- o Permanent drop box at law enforcement office
- o Both
- o I have not used the POD Progam

## 6. What factors made you use the POD Program? (Select all that apply)

- o It was the most convenient method
- o This is the only method I'm aware of
- This method provides the most privacty

0	I feel more comfortable disposing of medications at law enforcement offices
0	I have not used the POD Program
0	Other (please specify)
	ou have not used the POD Program, how do you currently dispose of your unused,
expire	ed, or unwanted medications? (Select all that apply)
0	Dispose of them in the sink/toilet
0	Throw away in the garbage
0	Burn them
0	Return to pharmacy
0	Keep them in unlocked cabinets or storage
0	Keep them in locked cabinets or storage
0	Give them to a relative/friend
0	I don't have any unused or expired medications to dispose of
	I don't know how to dispose of them
0	Other (please specify)
	at is the estimated amount of unused, unwanted, or expired medications that you
have o	disposed of in the past 12 months?
0	Less than 1 pound
0	1-5 pounds
0	Over 5 pounds
0	None
9. Ho	w frequently do you dispose of unused, unwanted, or expired medicines?
0	Once a month or more
0	A few times a year
0	Once a year
0	Once every few years
	Never
	hat is the best way to get information to you about how and where to dispose of
unuse	d, unwanted, and expired medications?
0	Media advertising (ex. TV, newspaper, magazines)
0	Social media (ex. Facebook, Twitter, Pinterest
0	Webpage
0	Brochures/handouts
0	Provide outreach through local government/community groups (ex. Newsletters, meetings, and community events)
0	I'm not interested in disposing of medications
0	Other (please specify)
0	Other (please specify)
11. W	hat County do you reside?
0	Antrim
0	Charlevoix
0	Cheboygan

- o Emmet o Other (please specify)\_
- 12. What is your age?
  - o Under 20
  - 0 21-40
  - 0 41-59
  - o 60 and over
- 13. What is your gender?

  o Male

  - o Female

Comments:			

## APPENDIX B: OPEN-ENDED RESPONSES

How did you hear about the POD Program? (Select all that apply)

Cheboygan Tribune (31 mentions)
Petoskey News Review (112 mentions)
Traverse City Record Eagle (12 mentions)
Other Newspapers

- Antrim County News (9 mentions)
- Boyne City Gazette (2 mentions)
- Charlevoix Courier (2 mentions)
- Elk Rapids News (7 mentions)
- Indian River (4 mentions)
- Harbor Light (4 mentions)
- Herald Times

#### **Community Partners (42 mentions)**

- Charlevoix County Recycling Department
- Antrim Health Department
- Charlevoix Conservation District
- Charlevoix County Community Foundation
- Charlevoix County Hazardous Household Waste Program information
- Cheboygan County Circuit Drug Court team member
- City of Petoskey
- Emmet County Recycle Board
- Emmet County Sheriff's Department
- · Friends of the Boyne River
- Harbor Springs Police Department
- HazMat Day handouts
- Health Department (3 mentions)
- Involvement with program
- Lake Charlevoix Association
- POD Community collection event (2 mentions)
- Police Department (7 mentions)
- Recycling program
- Sheriff Department (8 mentions)
- Tip of the Mitt Watershed Council (2 mentions)
- Torch Lake Preservation Association meeting
- Transfer Station
- County
- Little Traverse Bay Bands of Odawa Indians (2 mentions)

#### Doctor/Hospital (22 mentions)

- Clinic
- Doctor's office (6 mentions)

- · Dr. Wonski
- Hospital (4 mentions)
- Work at hospital (2 mentions)
- McLaren Northern Michigan, Petoskey (6 mentions)
- Munson Hospital, Traverse City
- Romer

### Pharmacy (43 mentions)

- Bellaire Pharmacy (2 mentions)
- Drug Store (5 mentions)
- Family Fare Drugstore (2 mentions)
- Indian River Pharmacy
- Pharmacy/Pharmacist (29 mentions)
- Rite Aid Pharmacy (2 mentions)
- Walgreens
- Retailer

### Saw a POD Box/Drop Off Event (42 mentions)

- City Hall (16 mentions)
- · Charlevoix Police
- Jail Lobby (5 mentions)
- East Jordan Police Department
- Sheriff/Police Station (9 mentions)
- McLaren Hospital
- Saw POD Box (9 mentions)

#### Other

- Family member/Friend (5 mentions)
- Health Professional (9 mentions)
- Hospice of Northern Michigan
- Internet (2 mentions)
- Mailing (2 mentions)
- Petoskey Friendship Center
- Presentations (2 mentions)
  - o Rotary Program
- Radio (18 mentions)
  - o 106.3 FM
  - o WTCM-580 AM
- · Summerfest Indian River
- Tax bill
- Surveys (6 mentions)
- TV News (2 mentions)
- Work (11 mentions)

#### Uncategorized (9 mentions)

- Unsure/Don't remember (7 mentions)
- I am aware of the Yellow Jug Program
- · Would like to have POD locations advertised more

### What factors made you use the POD Program? (Select all that apply)

#### Convenience

- Ability to stay in car (1 mention)
- Available 24/7 (1 mention)

#### **Environmental Protection (41 mentions)**

- Best for the environment (3 mentions)
- Better for Douglas Lake (where we live) and all our lakes
- Environmental concerns (2 mentions)
- It is the safest environmentally friendly means.(2 mentions)
- Protect the environment (4 mentions)
- · Alway taught to flush them this is more environmentally friendly and makes sense
- · I recognize how bad it is for the environment
- Medicines should not be disposed of in toilet or garbage (6 mentions)
- Environmental safety (3 mentions)
- To not pollute our waters (7 mentions)
- · Concerns about the environment and fraud
- I feel right with God and myself protecting our Earth
- · To keep drugs out of the environment
- · It's much better than throwing drugs away
- Never felt comfortable flushing medications
- Help prevent water pollution with drug residue (2 mentions)
- Stop pollution
- Do not want to contaminate soil or water by disposing of medications improperly (2 mentions)
- I feel this method is much better for every living thing versus flushing down the toilet or throwing them in our landfills.

### Not Applicable/Never used the POD Program

- Haven't used the program (31 mentions)
- No medications to dispose of (3 mentions)
- Dates don't work for me (1 mention)
- Not sure of where locations are or dates of events (6 mentions)

## Correct method of disposal/properly dispose of medications (6 mentions) Safety (10 mentions)

- . I don't want it getting in children's hands and I don't want to flush them down the toilet
- safest way for the community (2 mentions)
- I do not want drugs in home to tempt grandchildren
- · no chance for medications to end up in other hands
- Safety (4 mentions)
- It's a safe way to person and environment in disposing unwanted medications

## Use other disposal methods (6 mentions)

· Nursing home

- Local pharmacy (2 mentions)
  - o Rexall Pharmacy in Charlevoix
- Home health nurse
- I dispose of them at work
- · Give to daughter for POD program

#### Uncategorized

- Will use law enforcement offices
- Will use it again
- I will use the program in the future
- POD
- · I am new to the area

If you have not used the POD Program, how do you currently dispose of your unused, expired, or unwanted medications? (Select all that apply)

### Doctors Office/Vet/Clinic (8 mentions)

Mix with undesirable material and dispose of in trash (4 mentions)

- Put them in coffee grounds in a ziplock bag
- garbage per smartdisposal home page instructions baggy with kitty litter dissolved if appropriate (3 mentions)

### Other disposal method (7 mentions)

- Return envelope program
- Give to mother-in-law who is in health care and knows how/where to properly dispose of them.
- Soak in vinegar and then flush down toilet
- Over the counter things in garbage
- · Friendship Center in Petoskey
- Sealed and disposed of with medical waste
- Work I dispose with other chemical waste "solids"

#### Difficulty with location/dates of POD Program (4 mentions)

- Don't know where POD boxes are (3 mentions)
- Disposal times and sites seem very limited

## Accumulating medications for eventual disposal (4 mentions)

Use all medications as directed (4 mentions)

Use the POD Program (13 mentions)

Yellow Jug Program (2 mentions)

#### Uncategorized

- · Can I dispose of sharps at POD sites
- · My wife does it
- I will when I need to....great program
- I didn't know until recently
- I do not want to dispose at the sheriffs

What is the best way to get information to you about how and where to dispose of unused, unwanted, and expired medications?

All of the above (10 mentions)

Brochure/Handout (83 mentions)

Doctor Office (9 mentions)

Post information in public places (17 mentions)

- Pharmacy (12 mentions)
- Public locations
- Flyers in stores (2 mentions)
- · Store display
- Signage at local business

### Mail or email (23 mentions)

- Mail (12 mentions)
- Postcard
- Send a card specifying where and when
- Email (9 mentions)

#### Outreach (105 mentions)

Social Media (97 mentions)

#### Promote with prescriptions (7 mentions)

- · Information should be enclosed with every filled prescription
- Printed tag or sticker with each dispensed med at all pharmacies would be a start.
- Provide at locations that dispenses meds
- Have pharmacies hand out flyer/info when you get meds
- · Brochures at pharmacy counters
- Use the place that dispenses the medication for info on disposal.

#### Other (29 mentions)

- Radio (10 mentions)
- Web (11 mentions)
- Word of mouth
- Law enforcement
- Senior Center (3 mentions)
- In tax bill
- School system (2 mentions)

### Uncategorized

- Already aware (10 mentions)
- A display at places that have POD Program
- Don't have any medications to dispose of (2 mentions)
- More of these kinds of surveys with information
- Billboard along 31, I-75
- Local law enforcement
- · I wonder what becomes of these unwanted drugs?

Ask family (2 mentions)

## In what county do you reside?

Benton

**Grand Traverse (2 mentions)** 

Kalkaska (5 mentions)

Otsego

Tuscola

Wexford

Other

- Also have property in Antrim County
- Livingston My wife and I used to live in Charlevoix and still own property
- Just moved from Antrim County to Lenawee
- Cheboygan in summer, permanent resident in Saginaw
- Work in other counties

#### Comments:

- I think it is awesome!
- I would like more information of where those PODs are available. I think this sounds like a good program if they made deposit locations known and how are they disposed of when dropped off.
- It's a great program.
- · It's good, it works, and it needs more publicity.
- Great idea! Should have started sooner
- · It's a wonderful program that is needed.
- A good program, keep it going.
- Good to have such a program. Good for all environments and drug exposure deterrent.
- I believe it's wonderful!
- · Good idea.
- · Like it. Safe, easy, private.
- It should be a good program
- It works good!
- Excellent! Thank You!
- Great idea as I bet people flushed them in sink or toilet for years.
- We've been giving unused scripts to Modern Pharmacy for years and to the overseas program for "help the people."
- Should have started a long time ago needed a safe place to dispose of.

- We (my hubby and I) think the POD is AWESOME!
- Great program! Love clean water!
- Thanks for having this program!
- A high visibility drop box needs to be established other than law enforcement offices.
- Where is there a POD in my area?
- · Sounds like a great program word needs to get out about it!
- I think it is a wonderful program. Studies of all lakes surveyed, all tested for prescription. drugs in water (people flushing drugs down toilet)
- I think it is a great program to help keep drugs out of our water and landfills.
- · Very useful! However, no one takes syringes.
- We appreciate having it available and are thankful for a nearby location.
- · It's a good and important program.
- · Good program. Keep it up
- Great idea for people who don't know how to dispose of unused medications.
- Happy to have the POD. I am an RN and work with seniors so I know the amount of
  unused medication in our community. I started the 1st Drug Drop-Off Day at the
  Friendship Centers of Emmet County. We had to have a deputy and pharmacist on site.
  Eventually, the local hospital and some pharmacies started collecting. I am thrilled that I
  can now send folks to the POD!!
- Fantastic program answers/addresses what to do with unused prescriptions!
- I think that it is a great program, I just don't need to use it right not thankfully, no meds.
   :)
- If I had unused prescriptions, I would definitely use the program. I will use it in the future, I am sure.
- I think it is excellent!
- · Wasn't really familiar with it.
- Great Program
- · Do not trust anybody to dispose of any meds!
- · Worthwhile!
- · Great idea! I had been storing old/unused meds, wondering what to do with them!
- Great Program
- Safe and helpful
- Would also like to know when the next poison drop-off will be at the transfer station.
- It is a wonderful service to have available!
- So glad this is available, it keeps medicines out of our drinking water.
- Good program we should promote more!
- I haven't used POD as I don't use Rx meds. However, it is a GREAT program and should be utilized by all. I'm glad it exists.
- Great idea so they don't end up in the water or someone's hands they are not prescribed
- It's a good idea needs to be more widely advertised and accessible.

- I feel this is a good program. I haven't had to use it yet, but will in the future.
- I think it is a great idea and I will use it when I have unused meds
- I think it is good that you can get rid of all in our community.
- · Very smart program
- Great Job!!!
- I feel this program is needed and should be presented strongly. Start with eligible and qualified ages.
- It is a very good program. I hope it helps to keep drugs out of the wrong hands and out of our water supplies.
- · I am very interested in protecting our natural resources and think this is a great program.
- I am not sure at availability for local PODs. See there are occasional local events, but I find that inconvenient.
- It's a good way to dispose of unwanted medications.
- I think I'll call a drug store to see where to take my medicine. I have syringes I take to my
  vet. Not sure what to do with used ones.
- The most effective for us has been a setup at the market in Bellaire. I believe they also collect toxic substances.
- · Excellent program to protect our groundwater, streams, and lakes.
- · As far as it goes, it is fine. There are other things that need careful disposal.
- It's a great idea and hopefully it will help our environment in controlling waste.
- Excellent program
- · Thank you for caring! For God's gift to us!
- Great Program!
- Great program
- Great program, thanks for doing it! Keep our Great Lakes "Pure Michigan"
- Great program. When I was a kid, I watched as my mother flushed old vitamins and other and it always made me wonder if there could be a better way to dispose of them.
- Great program
- I think the POD Program is a great program. It makes it so much easier to get rid of old or unused meds.
- Why can't drug store or doctor offices be included as drop sites? They already must dispose of these items!
- It would be nice if you would have handouts at community centers and doctor's offices, especially those dealing with narcotics.
- The POD Program is a wonderful idea. I will use the drop off sites as soon as I remember to take my old medication with me!
- · I have not used the POD program yet, but I plan on using it soon.
- Good program
- Excellent program
- I learned about this program through the Friendship Center of Emmet County. The seniors really need this and their families.

- I think it's a great program, keeps the environment clean and from people getting a hold of them.
- I love that I can drop off any time, to a secure location without interrupting a pharmacist
  or going all the way to the back of the store. It is a very quick errand for me and keeps
  meds/chemicals out of our water!
- · Appears to be a valid program. If needed, I will use it.
- · Great! Better for our environment!
- I think it is great
- Would love to use POD Program. I took them to Walgreens Pharmacy and they had no
  idea and could care less.
- Sounds like a great program.
- · I think it is a safe program!
- . I think it's a great way to get rid of unused meds, instead of in landfills.
- · Excellent program!
- Awesome idea hopefully keeps community awareness to keep program alive and well.
- The program is great. We limit our use of prescription drugs.
- Just learned of permanent location at police station. Had thought there were only a few days a year when you could drop of at hospital or recycle station. Year round is great!
- · It is well worth the effort
- · I like the idea of the POD program.
- Need to keep meds out of our water!
- Seems like a good program, I would be interested in learning more about it. I'll probably google it.
- I thought pharmacies had drop offs too.
- · Did it for family member who passed away. Think it's great
- Makes good sense! Totally support the program.
- Thank you for having this wonderful program. When I picture the one TV commercial of the little boy drinking out of his sippy cup how awful that would be if he was my grandson. Yikes!
- This is the safest way for people to dispose of their unused meds.
- . I think it's a wonderful way to dispose of meds. I pray people continue to use it.
- I think this is an awesome program! We need to educate everyone what flushing meds do
  to our environment.
- Local pharmacy has had a drop off for quite a while. I think it's a really good idea and TV advertising has been really good.
- I think it's a great idea and will help keep drugs off the streets.
- Yellow Jug Program has more local sites available. POD Program seems redundant.
- This is a needed program for all to be aware of.
- There needs to be more places to dispose of unwanted meds and used diabetic needles.
- It is a great service, could have used it 16 years ago when my mother passed away. We had lots of meds to dispose of.

- · Safe and great way to dispose of meds.
- I think it's a great service that is important to community. Thank you. PS. Tried to do survey online, but could not access.
- I may have this confused with the collection at our pharmacy. They have a container for collection.
- The POD program provides a much needed aware of the potential ramifications careless disposal of medications. My primary concern, as an avid fisherman, is the issue in regard to lakes and streams.
- It's more than just program, it should be the law.
- Sounds like a good idea so children and animals are not contaminated as well as our waters.
- You need to let others know so they can use it. What about fraking?
- Provides one with a quick and easy way to dispose my old medications when I think of it.
   Available 24/7
- · Great Thank you!
- · Good work keep it up! Thanks!
- Glad we have it.
- I feel seniors would have the most meds to dispose of. I'd reach out to them in print, church, Dr. /dental offices for handouts. Pharmacies as well
- Love the program. I'm out there letting people know. I also do "round up day" with seniors. Hard for some seniors to get out around so I do it for them.
- · I think the POD program is a great program.
- Live in God's country! Want to for life! Thank you! :)
- Long been necessary gratis
- More drop off locations would help. Example grocery store service desks.
- I would love to know more about this program. I think this is a fantastic program now that I am aware of it. Please send me more info!
- I think it is necessary, and I am glad it is offered.
- You might explain the program in detail before presenting the survey.
- I'm glad it is available!
- I always thought this was the best way to get rid of unused and expired drugs. Not
  putting them in the soil or water.
- I believe it is the best way to dispose of medications. When my father died, I collected all
  of his medications and disposed of them in the Emmet County Sheriff's station on M-119.
- · Great idea!
- Great program I liked the convenience of the pharmacy as a drop-off place because it is somewhere I already go and not an extra stop.
- Terrific program for many reasons. Thanks for your participation.
- I would recommend anyone to use this program. I use this to prevent others to use and to
  protect our environment.

- I don't know where a POD is. It is at the sheriff department of city police? It's at a great program.
- It is a great service. It helps keep drugs out of our groundwater and rivers and streams.
- I would think brochures in newspapers or placed at gas stations and grocery stores would help people be more aware of the POD program, mainly for those without access to computers.
- It is a safe way for disposal. Also better for environment, opposed to flushing down the toilet.
- I think the POD program is absolutely necessary and people need to be made aware of the threat to keeping our water free from medication.
- The more convenient the access, the more likely it will be used.
- The hospital posts flyers and on their main website this project it helps.
- We currently and rarely use prescription medications but are now aware of the program and will use it in the future.
- · I think when I do get rid of products, I would feel safer leaving them at police dept.
- Have pharmacies be local drop off points and also push communication on subject since that is where people go to get medications frequently.
- · Fantastic program keeps the drugs out of our water supply.
- I think it is a great way to dispose of medications so that it helps protect our environment.
- Dr. should cut down on the amount of drugs per prescription. This country is a pill
  pushing country. Too much money to be made.
- My husband and I are very lucky to not have unused medication in our home. The meds
  we take monthly we use. When we are prescribed something, we use all of it, but if we
  have some drugs to dispose of, we will use the program.
- Could be more accessible so it remains in a person's mind. I don't think about it a lot of times till I see it advertised.
- I think it is a great program I just don't have any meds to dispose of. If I did, I would
  take them to the police dept. I trust that site.
- Haven't used yet, but it's the only way we would dispose of meds in the future aware of
  ground water contamination crisis and meds. We do not have children, grandchildren, so
  not concerned about misuse. It's a great program hopefully it is getting increasing usage
  among residents. Years ago for a microbiology class in the Pontiac, MI area, we went to
  a sewage treatment plant WOW, was that an eye opener. So many years ago, I was very
  aware that anything down any drains can end up in our water sources.
- · Think it great, better than flushing or being stolen.
- Great idea! I don't take medications so I have never used before. When I need to dispose
  of meds, I will use this method though.
- I think it is great and long overdue for our environment! I do bring outdated meds from the schools. Perhaps incorporating the info to the students when they do the spring boat trip to Lake Charlevoix would reach more households.
- Very good idea!
- Good Program

- I did not know law enforcement took old drugs. If so, this needs to be advertised. We
  need disposal all the time year round and the hours available. Proper disposal would be
  used more than.
- It's great there is a place to dispose of old drugs (also chemicals, etc.) I do feel more
  people need to be made aware of the program through community outreach. Perhaps
  give the kids some info to bring home to their parents from school
- I saw a person putting pill down the toilet and though that was not going to be for a sewage system, but did not know a better way than.
- · I think it's a good and necessary program.
- When going to recycle my old paint, etc., it was the 1st contact before going into the building!
- Dropped off my g-ma Rx drugs when she passed away. Thank you for providing the great service.
- Convenient
- Good program
- Good luck! Thanks!
- I have used the sheriff office drop box many times. It is a good spot and a very good program.
- Would appreciate more information about drop off sites.
- Great program and service; protects environment!
- · I think it is a good program
- · I hope it continues! Our local drop off is convenient quick and easy in and out! Thanks
- Great program to have available, but please advertise the community collections better I always miss them. Flyers posted around town would be good.
- It's the best way to keep them out of the natural environment and away from drug abusers. But curious as to where they go from POD?
- · Great effort! Thanks!
- · It was good to have a safe place to get rid of meds after someone passed away.
- · A very good way to dispose of outdated medications.
- I have no prescriptions meds, but should I ever need to dispose of them, I prefer a convenient drop-off say Walgreens I have no idea where a drop off site currently is.
- This is a good program for the disposal of old meds. However, I personally have a use for it.
- Don't know where to go for POD drop off
- My wife recently passed away and there was a lot of unused medication left. I am not aware of where to dispose of these meds. I need to know where to dispose of them.
- Is a good thing so people or children don't hurt themselves by getting a hand on them.
- · Anything we can do to protect or environment is a win!
- POD is a very convenient way to dispose of my unused medications so that other people don't get their hands on them, and it helps to prevent water contamination from flushing them in the toilet.

- It's great! :)
- Excellent!
- I think it's a great program! With the problem of prescription drug abuse, it's great to dispose of them!
- I think it's a really great program and a great alternative to ways people used to dispose of meds.
- · I think it is very important to keep going
- · It is a great program safe, secure, and the right way to dispose of medication.
- I would like to know where the PODs are located. I think it is a good program we need to keep our fish and wildlife safe from pollution.
- Great program but locations are not advertised well. I would love a list emailed to me if possible. Thanks!
- I will use it in the future. I do not take any medications.
- It's great!!
- Feel the program is doing a good job about educating about the hazards of improper disposal of medication
- Excellent program. I used to burn or horde outdated meds before POD. The fact there is a POD makes me want to clean out meds periodically.
- Disposed of husband's medications when he passed away. My pharmacy takes medication or law enforcement
- As far as I know, there is a POD in the Village of Mancelona? Even if I needed to use it, I couldn't.
- There should be PODs in all pharmacies. Also, they should be self-serve. I don't feel
  comfortable giving my meds to someone to put them in a POD. I'd rather know for sure
  they got in there. Need more PODs and knowledge of where there located. I use
  pharmacy in Petoskey.
- I have many grandchildren, nieces, and nephews, and am trying to do the best I can in recycling and clean water. Also there are too many problems with our drugs and addicts now.
- · It's an easy and important way to keep our waters clean of drugs.
- My husband had a lot of pills left when he died and this was an easy way to get rid of them responsibly.
- · This is valuable consumer awareness
- PODs in more locations would great near pharmacies and recycling centers. Drive up
- I would just like to know exactly what I do with meds. Do I remove them from packaging and bring them to wherever in a plastic bag?
- Logical
- Would use if I had been aware of the program. It's a good idea as I hate throwing expired meds into my septic system as it can go into ground water.
- All medication should be disposed of in the POD to prevent them from getting in our water and out of the hands of drug users.

- How does the POD program dispose of these drugs? I cannot bring myself to use the program until I know all about it.
- Having been in Early Childhood Education/Family Life Education for my 27+ years, it is now so necessary to inform, education and DO something about prescription medication in the hands of people who are not prescribed!
- · It makes it very easy to dispose of unused prescriptions.
- · I am pleased to have this service available!
- Very good program
- I think it's a great program. Just more people need to be educated about it.
- The POD Program keeps meds out of our waterways and land. The earth, after all, is the only home we have. We must care for it!
- · good and excellent program
- The program is a good way to dispose of any old medications. Although I have not used it yet, because I am not sure if I am supposed to take the labels with my personal information off or leave it on. Also, I have a lot of other outdated medication that you get from the store for colds, etc. and I don't know if I am supposed to bring that to the POD program drop off too or how to dispose of it. More information is needed on how the program works. L
- I like being able to safely drop off unused/unneeded medications and keeping them out of the water.
- Good program and nice ads on TV. I do not have the need to throw away drugs as I use them as prescribed and there is none left over.
- · Thank you for bringing awareness!
- It's a wonderful program. The pharmacy in Burns Clinic would dispose of them before there was a program.
- I believe it is an important service for our wellbeing. I will use it when needed.
- Good and positive program
- It is wonderful. I used to wonder what to do with them and eventually flushed them or took them to the woods and buried them outside of the packaging, but it was still disrupting our ecosystem.
- Very good idea, but have no need to use it.
- I think it's a great program, but feel it needs to be advertised more.
- It's a great way to get unused medication out of your home.
- Sounds like a great program, but I use all my medicine as prescribed.
- Excellent program!
- Thank you for providing this free and vital program.
- Very good!
- Excellent program but more people need to be aware of and actually use it. Some people
  do not like taking used drugs to law enforcement. Need more collection points I.e.,
  doctors' offices, pharmacies, social services
- The POD program was great when my husband died. He had 14 prescriptions to dispose
  of and it made me feel good about doing it in an appropriate way.

- I have known about the program for a long time. I gathered all our expired/unused drugs, but I haven't gotten them to the POD yet!
- · Like it
- It's a great way to dispose of this stuff. We don't use a lot of meds, but it is nice to know
  what's left if we don't use it all, we can properly dispose of it without getting in the
  wrong hands or our environment.
- A good effective, safe, and environmentally friendly way to keep drugs off the streets and away from experimenting by young children.
- I love this program. It's nice not to use the trash or put in our water. We need this
  program to keep going. It all helps in the end. Thanks.
- Good thing to start and hope to see it keeps growing!
- More information on TV. Allot of the elderly don't do social media or get on the web.
   Need to list locations of POD.
- I am sure it is an important issue and would use it if we have excess medications.
- I used it to get rid of my husband meds after he died in 2011.
- I haven't yet, but would use the law enforcement office.
- · We also use the drop off at Central Drug
- Good idea!
- Excellent way to get rid of old/unused meds!
- Thanks for providing this program! :)
- · I'm thankful for the POD program; it protects us and animals and the earth
- A huge service to the community and our environment.
- I feel like it's a very good program, everyone should use it if they aren't already and recycle.
- Most of our Rx are taken and we don't have kids around.
- Have taken old or unused drugs to pharmacy for them to dispose of. Flushing in toilet just doesn't sound good.
- · Good Program!
- It's a good plan, but it needs more promotion
- I would like to use this. Could you tell me where it is? I will tell patients as well since I
  am a physician.
- I am very happy they have seen the need for this type of program and have got it up and running.
- Best way to get rid of discontinued prescriptions. Was suggested during consumer council meeting, been taking unused prescriptions back to pharmacy over the last 5 or 8 years.
- Before I retired, I took unused pills to work where they had law enforcement officers stationed one day for that purpose.
- Until I knew of this program, I wasn't aware of what prescription medication could do to the environment.
- I like it. I like the idea of not flushing prescription drugs.

- Would like to lean more. Disappointed to have never heard of program.
- · Program was presented at the Senior Center in Mancelona
- This is the safest way to protect the environment. I want the world to be clean and safe for my grandchildren.
- We need to protect our resources. Get the word out.
- Needs to be made more aware of where they are located. I will be using them.
- · I'm glad they finally found a safe way to dispose of our meds and prescriptions.
- I'm glad it is available so we do not contaminate our environment or lets meds get into the wrong hands.
- Recently read and it will be available at our senior expo in Cheboygan.
- · Great program!
- In our community, it is not convenient to make use of the POD program.
- I've never heard of it.
- · This is a great program.
- It's a great program!
- Need more drop boxes open after 5 pm. You pretty much have to take a day off to dispose of meds.
- I LOVE the POD Program. I'm a Registered Nurse and talk about the POD drop-off sites to everyone who needs to dispose of meds.
- Tried to find survey online. Was unsuccessful
- Great idea
- · It's a good program, my care takes care of this and uses the POD
- · Whoever came up with the POD idea, this was great for our Great Lakes (cleaner water).
- Thank you for starting this program. The idea of unused meds getting into our water is very scary.
- · Great idea. Will use when needed, take none at this time.
- I think the program is great. It keeps the drugs out of the rivers and lakes. I think the
  commercial with the baby using the bottle with the drugs in it with water is too scary.
- · Great Program, will definitely use if/when I have medications to dispose of
- It's all about keeping our Great Lakes clean and people safe.
- This program is a good start to help keep kids and our land safer.
- I wish everybody would use it. Maybe we need more billboards or info panes in supermarkets - Walmart, Glens, Home Depot, Lowes, etc.
- · This is a great program. Keep it going!
- · Great idea to not have drugs in our water system.
- · Safe way to dispose drugs
- · Helps put drugs where they belong
- Have used Charlevoix Sheriff Dept. and CL Pharm "yellow" jug. Neighbors (elderly)
  have needed help with this info needs to be given utility bills, tax bills, or some medium
  that goes to all households, including property owners and rentals.

- Water quality is very important to our family since we enjoy fishing, boating, kayaking, and swimming when weather permits. Also, our drinking water is one of the utmost importance to our wellbeing. Proper disposal of unwanted, unused medications is a must.
- I think it is a very good program.
- Great program. Please make drop boxes more widely available in small rural communities or pharmacies.
- I have not used the program. I have no need as of yet
- Anything that helps the environment and stops the wrong people from getting them is a good thing. Thank you
- · Great Idea
- What locations near me have POD?
- The POD Program is better than just flushing down the drain. Well done.
- · Thanks for providing this service.
- Very good program. I hope everyone uses it.
- · Prior to knowing about the POD program, I disposed of medications in regular garbage. :(
- Would like to learn more about it.
- · Excellent and convenient
- . Think it is a great idea to keep our water clean of drugs our water is unhealthy enough
- I encourage clients to get rid of outdated meds and if it's more convenient for them, I take
  theirs to local law enforcement because I am in the county courthouse once a week. Keep
  up the good work!
- The POD Program is great but it is very hard to find a place that takes used needles.
   There is a need for this.
- Great Program!
- · I think it is a very and necessary program.
- · It is the best!
- Great program. Question....how do you finally dispose of the collected medications
- · It's a good program
- · Great program!
- · Very useful program. So glad we have it!
- · Great program very convenient
- Keep it up! This is a wonderful program to protect the environment.
- Still find it challenging to find a convenient location to easily drop off old medications.
   Law enforcement agencies is NOT convenient.
- My mother pass away Nov. 21st, I had 15 years of medications in "her drawer," my friend told me about the drop box. It was convenient.
- · I think it is a wonderful program.
- I think it's a very good program!
- I certainly would like to learn more.
- Nice program

- We need to clear items from an elderly members home more info needs to be targeted to
  the elderly. There is no convenient way for those who are homebound or living in a
  senior cent to get to those places for disposal. New ideas are needed for these seniors.
- Thankful for a safe disposal. Had many prescriptions left over after a 2012 surgery.
- Good idea need more drop off boxes (unless this would pose an increase # of problems, i.e., theft)
- It was something I had always said I'd do, but didn't get around to. The hospitals
  collection was so easy and convenient.
- I think we should use the POD Program as a stepping stone to making people aware of other chemicals that need to be not used or disposed of correctly!
- It makes it so easy and safe to dispose of meds. Mother Earth and our grandchildren and great grads are better off.
- I very seldom need to use it, but the one at E.J. P.D. is very convenient.
- · Love the program. Quick and easy and keeps our lands and water drug free.
- I think it's a great program. I wish it have been in place when our children were young.
- Not emphasized enough
- 1. Continue educating people 2. List of drop off locations in your area 3. Coordinate with local pharmacies, doctors, and hospitals to provide info where to drop off
- Very good idea!
- I appreciate having a safe way to dispose of narcotic pain meds used by my husband before he passed away. Thank you.
- Good idea keep drugs out of our wonderful water
- Makes sense completely
- This is a good program to get rid of old meds.
- Great safe program
- I am very grateful to have convenient, year-round drop-off locations provided. It is so
  important to take care of our earth and to have a safe place to take unwanted/expired
  medications.
- · Very good program!
- · Advertise and educate more
- We need to have more put in stores so people can see them and use them.
- I've been aware of this for years. I'm a lifetime member in NWF and they always address
  it.
- Keep up the good work!
- Check hospice I have in the past watched them dispose of deceased patients' meds in the toilet.
- This is a wonderful program. As a single mom with two elementary kids having the schools add info on places and dates of Rx drop offs is the best way to reach me. The Thursday folder is my main source of community info during the school year.
- Doctors are the cause of lots of problems with drugs. They prescribe way too many.
   When my daughter had her wisdom teeth out, she was given a bottle full of Vicodin -

way too many!!! My sister became addicted to prescription drugs because her doctor prescribing way too much. She is now dead. This program is great. People need to dispose properly. Could doctors also be more accountable to this problem?

- It makes great sense not to flush or put in garbage as it will make it to the water supply.
- · Great program! Helps protect drinking water and lakes!
- I think it is a good thing for the community.
- Just trying to save the environment for future generations.
- It's probably a good thing
- Waste of \$
- I like the old drug, yellow jug program available at pharmacy. It is more convenient than
  police or sheriff office.
- · I think it's wonderful. I am very concerned about our lakes and rivers.
- A great program. I never knew how to dispose of medications other than in the toilet.
   Commercials opened my eyes.
- Thank you for the opportunity to help our environment.
- . It needs to be more convenient. I don't know where it is near us.
- · good way to dispose of the if you are allergic to them
- · Love the POD Program! Thank you!
- I do not have any unused medications but I would want them in a secured drop off if I needed one!
- · I think this is a great program.
- Great program, but I wish we could do more about eliminating the drugs that come from human waste, which I understand contributes much more to the problem.
- What about getting handouts to pharmacies, clinics, etc. Most of us keep expired meds because we don't know what to do with them. Keep up the info/easy drop-off! Thank You!
- · Great way to keep our water safer!
- Should be a POD receptacle at every location that sells drugs
- A good idea. I will take advantage of it.
- Very safe and convenient
- It's awesome to be able to get rid of the meds if I ever have any to get rid of.
- · Send me info on POD Program for Antrim Review
- I think it is an excellent program. But for us, we only have two prescriptions between us and we use all of them.
- I think it's a great program and it's all done very safely.
- I think it is a very good program. It keeps drugs out of our water and out of the hands of kids and abusers of prescriptions that are harmful to everyone.
- · I think it's a good thing. We need to protect our water supplies and lakes and streams.
- Modern Pharmacy in Cheboygan has a drop off too
- I cannot imagine anyone who would not want to participate in the POD Program!
- Need more info

- · Excellent program as is the hazardous waste collection drop off.
- It's a safe way to dispose meds to keep them away from children, and persons that sells them to others. Great program!!
- A good thing
- Keep it up!
- Thanks for the information as my wife has passed and I did not know what to do with meds.
- Good idea, but know of no one that utilizes. I have suggested its use to patients.
- It is a good idea! Safe. Effective. Keep it up!
- Great program
- I will use the POD program if needed. I just haven't needed it yet.
- I saw one at the County Bldg., but not a lot of people go there. Senior Centers or pharmacy would be a great place.
- · Good way to get rid of medicines no longer needed!
- · Great idea! Keep harmful meds out of water and sail.
- POD is a great program. I would like to see more drop sites.
- · Great Program!
- Great educational commercials!
- · I think it is very good. We do not want them in our lakes and rivers.
- · Great program! Thanks!
- Your program, this survey plus any other ways your put information out to all of the communities in northern Michigan, are all a necessity.
- A POD Program should be made easy for everyone to participate in. Local for everyone.
- The only time I tried (a few years ago), the city police seemed uncertain about what to do
  about it. Told me to go to pharmacy and pharmacy told me to go to local police.
- The POD program is a good thing to be aware of, to keep it out of reach of children and others.
- I think it's great to have a place to take unused/expired medications prior to the program, I think many were unaware of the dangers of improper disposal.
- I think it's great to have a place to take unused/expired medications prior to the program, I think many were unaware of the dangers of improper disposal.
- I used it after my mom and sister died and again after my husband passed to get rid of unused medicine.
- Wonderful program
- It is good to let the public know how to dispose of drugs.
- I think this is a great program to have. Too many kids now days get their hands on meds and they can affect them deadly.
- I discuss this with clients and encourage them to use the program.
- It's a great and safe program.
- Very interested in receiving information on this and also to pass on this info to friends.

- I hope it works. We do not want this kind of pollution and the program is a way to prevent it.
- People do not understand the breakdown of meds on their own over time and when in water.
- Great!
- · Very good program, please continue
- · This is a great program!
- · Excellent program and just kept the meds before.
- I think it's great! I may be a bit biased being an environmental consultant. :)
- I think it is a great program to help keep our land, rivers, and lakes clean. And to keep meds out of the reach of others.
- I think the POD program is a good way to dispose of expired or extra meds. Hopefully, people use it!
- · Please email me details on this program and I will be glad to share with others.
- · Great eco saving idea!
- It is an excellent program.
- I like the convenience of the drop box.
- I think it's an excellent idea. I have just review our cabinets and plan to visit the POD at the Indian River drop site. I just started taking injections and with they also took properly contained syringes.
- If I took any medication I feel the POD program through law enforcement is the best.
- · It's great for those who need; when I need, I will use.
- Like having a way to dispose of unused drugs. Not comfortable taking unused drugs to a pharmacy.
- It would be WONDERFUL to have PODS at ALL pharmacies.
- I think it is great to raise awareness around the community. I would have never thought to lock up meds when I knew workers were coming over. I think this will help cut back on substance abuse.
- · I think that it is a very good program
- · TV is the best for me
- We are very lucky to have this available.
- I think it's an excellent way to get rid of medicines not used anymore by people.
- I feel that chemical pollution is our largest danger plus invasive species in our land and water. Some plants that are sold commercially should be outlawed.
- · It's a great program, increase community awareness if possible!
- It is very convenient method of disposing unneeded or unused drugs and helps keep them out of criminal hands and prevent water pollution.
- Excellent program. Keeps unused drugs off the street, protects wildlife, drinking water and the environment in general
- I will definitely use it when I have medicines to dispose of! It's a great source
- There should be more permanent drop boxes in the area besides law enforcement offices.

- Nice to raise awareness
- Don't have health insurance
- Great program! Would like to see collections on a more frequent basis.
- A very good program
- Great idea
- I think it's a great program. Until I received this questionnaire, I had no idea where to find a POD.
- I think it is a great program, I will use it when I need to!
- I've heard about it, but where are the receptacles?
- We don't want medications affecting our drinking water!
- I have never needed the POD Program but have friends who have used it. We agree it's a
  great program.
- Easy and accessible disposal and close to my home
- I would like to know where I can dispose of old scripts that is available daily, not limited
  to occasional dates because I forget about them.
- This is a great program to keep meds out of the water supply.
- · I thank you for your efforts.
- I'm thankful this program is available a safe way to dispose of unused prescriptions.
- · Very happy that we have this service.
- Wonderful program
- · I refer patients frequently.
- I think it's a great program. I'm for anything that saves the environment. The drop off is close and convenient for me.
- Keep up the good work.
- Makes me feel good to dispose of things properly. Most friends and family are unaware
  of the program.
- I feel this is a wonderful, safe way to dispose of these meds. I remember back in 1997, I started working in group homes and we flushed any unused meds. This is so much safer.
- Need to specify areas to drop off medication
- I feel it's an excellent program. We've got to keep drugs out of our young people's
  hands. They seem to take anything they can get their hands on. For what?? Some kind of
  high????
- Dropping off at the pharmacy seems to work for same disposal too.
- I'm glad for it I'm for saving the environment
- · Great!
- I'm aware now for future.
- Need drop box at pharmacy
- Great program. Would use if needed.
- I only recently heard of this and have considered using this the next time I dispose of medications. Good idea - thank you!
- Great Concept! Use this service on a regular basis.

- · Great program, refer people to it.
- · Great program! I plan to use!
- convenient-private
- I'm aware of the program, just do not dispose medication very often, but would think
  more about it. Not sure of disposing of empty med bottles? Will check out the website.
  Thanks!
- I think it's a great program
- · Very good program!
- · Good idea one more way to protect environment (esp. water) & kids.
- · Need to know the closest location. Need to know how to dispose of Epi-pen
- Great Program! Ten years ago when my parents were in Hospice, at their death Hospice took their medication and flushed it down the toilet (Pain killers). We donated the rest back to Hospice that could be used for low-income. The amount of pain killers, a form of Morphine that was flushed was large!
- I plan to use POD in the future
- I appreciate that I have local places to recycle my outdated medications so that I can help prevent polluting our environment.
- · Would like to know more locations
- I think it is a great thing!
- It's very important to protect our waters in this beautiful local
- I think it is a good program and I plan to use it in the future.
- Good program. Our pharmacy also has the "yellow jug" program.
- Great program lucky to have it!
- Drop off locations most needed info
- · I'm glad it's here for safe disposal.
- The TV ads are great, but could provide more information on where to find the POD Drop-off locations.
- I am interested in learning more about it.
- Great!
- Think it's a great safe way to dispose of meds.
- · It's a great way to dispose of meds. And I feel the message is out there for everyone.
- I think it's a wonderful idea about the program so the wrong people don't get a pick of the unused drugs and so it doesn't get in our water system.
- · Good positive productive program
- I have not noticed your representation at music festivals or at farm markets.
- · Seems very effective good to have available in our area!
- I will start using the program, but I would like to know where I can drop off medications in my area.
- I'm glad there's a safe disposal method so no chemicals from meds go into the water system.
- I think it's a great program to have, and if I need it, I'll use it for sure.

- It is such an easy way to get unwanted medications out of the house without worry of endangering others or the environment.
- · A needed and good idea
- I believe if we teach the kids why it's important and tell them to help teach parents (why) in the older days, it hurts out environment! They will go home and teach parents.
   If not, you still win because the kids are our future.
- · Sounds like a good program. Hope to use it in the future.
- I am ALL for it!
- This comment may not apply to this program, but Emmet County needs a more
  accessible hazardous waste program like the one in Cheboygan County, which would
  allow a weekly, easy, accessible drop-off site. Emmet County's program is ridiculous
  and contributes to shameless public dumping.
- I think it is great! I have talked others into using.
- What do you do with the returned OTC drugs? Why are you wanting to have the unused OTC drugs? I'm not interested in boiler plate answers, but the real reasons for the program.
- I'm glad that it's available. I am lucky I need to use few drugs and I never have leftovers. If I ever have to, I'll use the program.
- I think the POD should also be available at the pharmacies.
- I am so thankful that this program exists to take care of unused medications.
- Great Idea and Program
- A good deal
- Thank you for your intentional efforts to help protect one of the God-given gifts that is our freshwater sources.
- Good!
- Before this program was available, I had a dog on Rx when he dies, the vet disposed of the left over Rx. Be good to make people aware of program for pet's left over Rx's.
- I will start taking expired medications to the police station drop-off.
- I am glad we have the program in Boyne City.
- I think it is great!
- I think it's awesome. I feel comfortable using it since there are no privacy concerns with me. I also believe the pharmacy I do business with has a drop off option.
- Such an important program to protect our environment. We tend to have very few
  medications in our home that need to be disposed of, but truly appreciate that there is a
  safe place to do so.
- I can turn my meds and over the counter meds into the drop box, but what do we do with creams that are meds?
- I think it's the safest way. And no one else gets their hands on them. Just so much safer, to the environment too!
- Great way to keep our waters safe and clean.
- I would like to know more and where to take expired medications. I will call the number below.

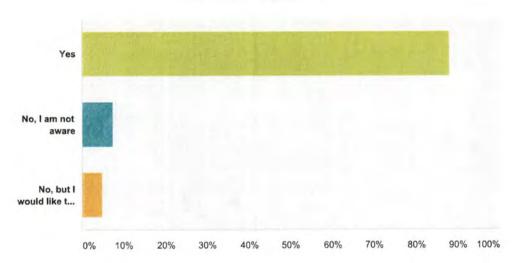
- Love it! We need to do everything we can to keep our environment clean.
- Love it! :)
- I think it is a fabulous program and a necessary one.
- · Sounds like a great program
- · Thank you for providing this very important service
- · Great safe program
- I rarely have anything to dispose, but it should be EASY for everyone and it would make the most sense to have a drop off box where you pick up your medicines.
- Thanks for creating this program! :)
- · It's a great program! Thank you!
- · Thank you for the useful information.
- Information as to when and where the POD program is available would be helpful
- was a great way to get rid of mother-in-law's meds after she passed away
- · I have been saving them to dispose at the local police dept. Just haven't done yet.
- Like recycling, this is yet another way to help save our planet and it's free!
- thank you for the program, I always have a place to take the drugs
- Include web address all advertising make it easy to find the 'how-to' information.
- Will use Pod soon
- Before I knew about POD I took our unused meds to Walgreens and Rite Aid. Both refused; they did however, provide information as to police stations having drop off boxes.
- · Love to fish and love our clean water. Great program.
- · I really appreciate the POD system.
- Would be more convenient if they could be dropped off more often. Sometimes I'm not available on drop-off day.
- Sounds like a great way to dispose of potentially harmful substances. I do not have meds
  to discard but would use POD if need arises.
- I am very glad this program exists and that more information is becoming available regarding the damage pills have on our well water.
- As far as I know, the Sheriff's office is the only place to properly dispose of prescription drugs, though I'd think drug stores would be. If they are, it's not well publicized.
- · This program is fantastic. Only wish you could also drop off inhalers in the boxes as well
- It would be helpful to get a list of drop off sites & hours mailed to me, so I have a hard copy to refer to.
- Great Program
- I think it's illegal to mail medication, but if it were possible this would be a much easier, less time consuming, and convenient way to dispose of meds.
- I never realized that improperly disposing over the counter medications was unsafe. I
  thought it only applied to prescription drugs:(
- Good program!!
- I work at a hospital and use their pharmacy

- Love the program; you have made it so easy to dispose of unwanted and outdated drugs.
   I used to tell my patients of this method of disposal as well.
- I think it's an awesome program. I remind everyone about it. When I get to the point I need this program I will be using it. Thank you.
- · People need to be aware of POD program and use it.
- · It makes sense to dispose them in a safe way.
- Question one. If you are not aware how do you answer any of the other questions?
- The main disposal groups like a care Facility that disposes of a lot of drugs/medicine need to be informed and even checked upon!

# APPENDIX C: FIGURES AND SUMMARY DATA

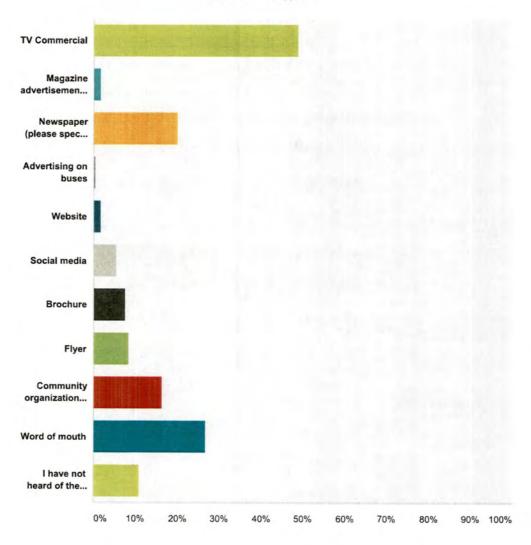
Northern Michigan POD Survey

### Q2 Are you aware of the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan?



Answer Choices	Responses	
Yes	87.93%	1,246
No, I am not aware	7.27%	103
No, but I would like to learn more about it	4.80%	68
Total Control of the		1,417

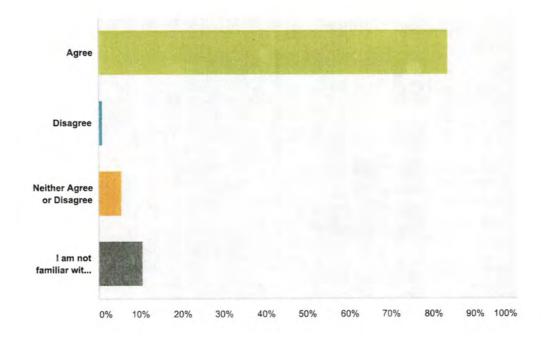
# Q3 How did you hear about the POD Program? (Select all that apply)



wer Choices	Responses	
TV Commercial	48.91%	693
Magazine advertisement (please specify below, if possible)	1.69%	24
Newspaper (please specify below, if possible)	20.11%	285
Advertising on buses	0.35%	5
Website	1.62%	23
Social media	5.43%	77
Brochure	7.48%	106
Flyer	8.40%	119
Community organization (ex. newsletters, meetings, presentations)	16.23%	230

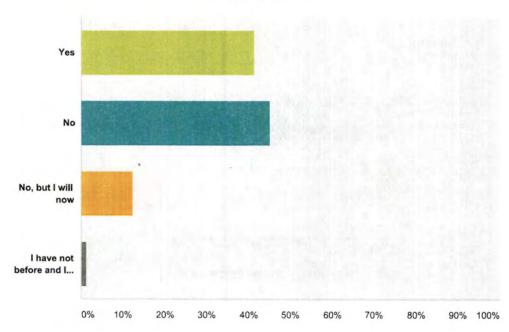
Word of mouth	26.82%	380
I have not heard of the POD Program	10.94%	155
otal Respondents: 1,417		

# Q4 The POD Program has raised my awareness about how and where to properly dispose of unwanted, unused, or expired medications.



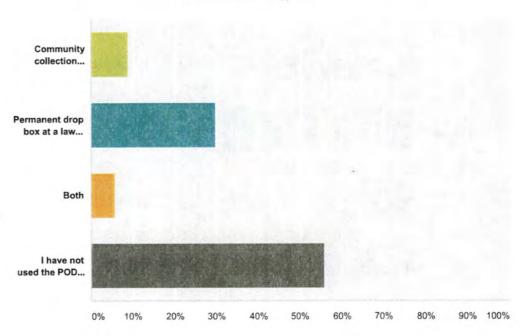
swer Choices	Responses	
Agree	83.49%	1,183
Disagree	0.78%	11
Neither Agree or Disagree	5.36%	76
I am not familiar with the POD Program	10.37%	147
tal		1,417

# Q5 Have you used the POD Program in Northern Michigan in the past 12 months?



nswer Choices	Responses	
Yes	41.43%	587
No	45.02%	638
No, but I will now	12.35%	175
I have not before and I will probably not in the future	1.20%	17
otal Transition of the Contract of the Contrac	Section 2 de la constitución de la	1,417

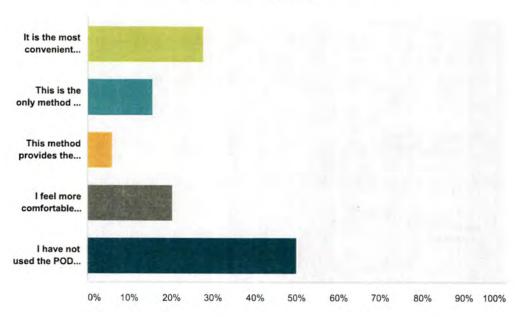
# Q6 If you have used the POD Program, what method of POD disposal did you use?



nswer Choices	Responses	
Community collection event	8.82%	125
Permanent drop box at a law enforcement office	29.64%	420
Both	5.72%	81
I have not used the POD Program	55.82%	791
otal		1,417

# Q7 What factors made you use the POD Program? (Select all that apply)

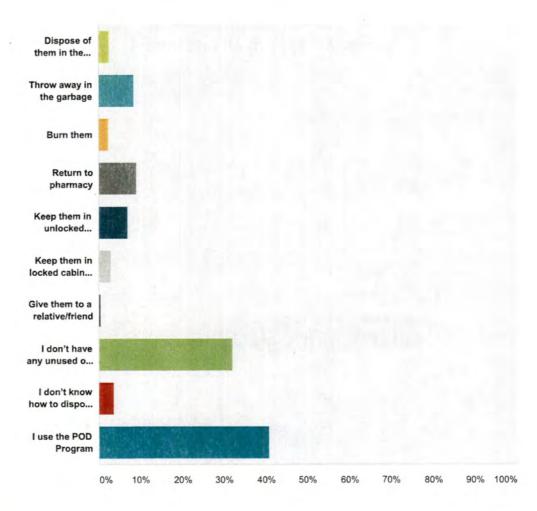




nswer Choices	Responses	
It is the most convenient method	27.52%	390
This is the only method I'm aware of	15.46%	219
This method provides the most privacy	5.86%	83
I feel more comfortable disposing of medications at law enforcement offices	20.25%	287
I have not used the POD Program	49.89%	707
tal Respondents: 1,417		

Q8 If you have not used the POD Program, how do you currently dispose of your unused, expired, or unwanted medications? (Select all that apply)

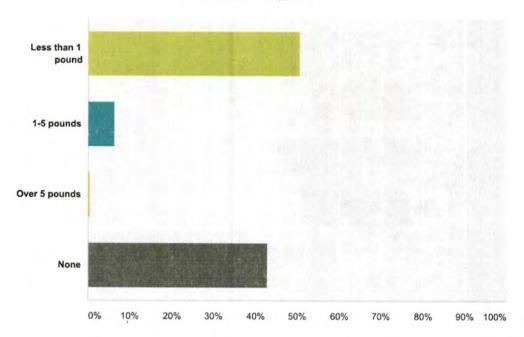
Answered: 1,368 Skipped: 66



swer Choices	Responses	
Dispose of them in the sink/toilet		33
Throw away in the garbage		114
Burn them		30
Return to pharmacy	9.06%	124
Keep them in unlocked cabinets or storage	6.87%	9-
Keep them in locked cabinets or storage	2.92%	4
Give them to a relative/friend	0.51%	
I don't have any unused or expired medications to dispose of	32.02%	43
I don't know how to dispose of them	3.58%	4
I use the POD Program	40.72%	557
al Respondents: 1,368		

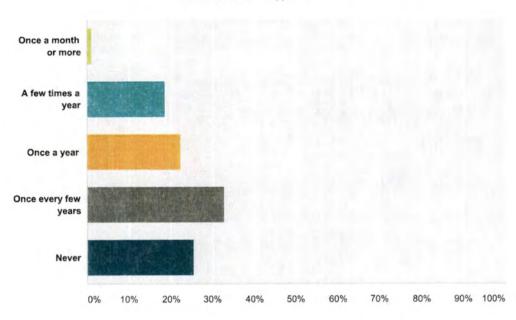
# Q9 What is the estimated amount of unused, unwanted, or expired medications that you have disposed of in the past 12 months?





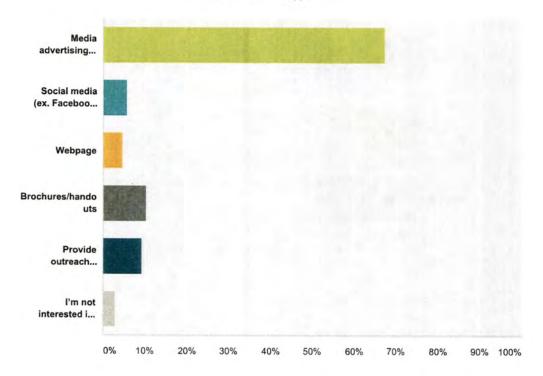
Responses	
50.46%	715
6.21%	88
0.49%	7
42.84%	607
	50.46% 6.21% 0.49%

# Q10 How frequently do you dispose of unused, unwanted, or expired medicines?



nswer Choices	Responses	
Once a month or more	1.06%	15
A few times a year	18.49%	262
Once a year	22.30%	316
Once every few years	32.75%	464
Never	25.41%	360
otal Manager M		1,417

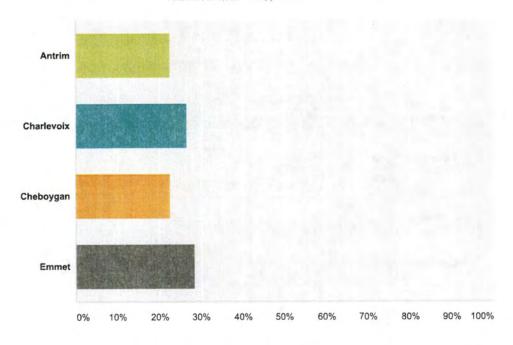
# Q11 What is the best way to get information to you about how and where to dispose of unused, unwanted, and expired medications?



nswer Choices	Response	es
Media advertising (ex. TV, newspaper, magazines)	67.33%	954
Social media (ex. Facebook, Twitter, Pinterest)	5.65%	80
Webpage	4.59%	65
Brochures/handouts	10.23%	145
Provide outreach through local government/community groups (ex. Newsletters, meetings, and community events)	9.24%	131
I'm not interested in disposing of medications	2.96%	42
otal		1,417

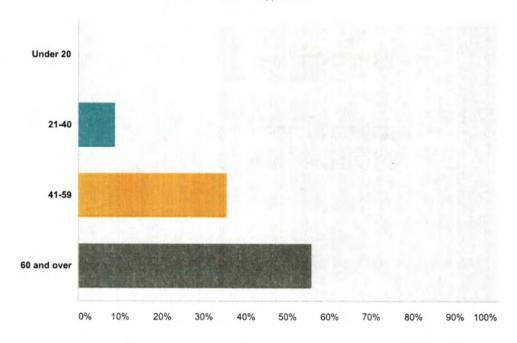
# Q12 In what county do you reside?

Answered: 1,388 Skipped: 46



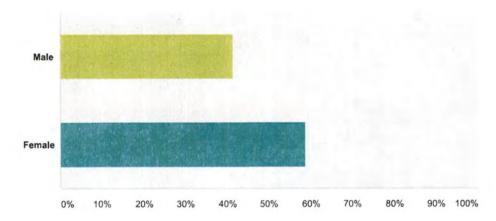
nswer Choices	Responses	
Antrim	22.48%	312
Charlevoix	26.59%	369
Cheboygan	22.48%	312
Emmet	28.46%	395
otal		1,388

## Q13 What is your age?



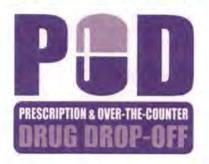
nswer Choices	Responses	
Under 20	0.00%	0
21-40	8.70%	114
41-59	35.50%	465
60 and over	55.80%	731
tal		1,310

## Q14 What is your gender?



Answer Choices	Responses	
Male	41.33%	536
Female	58.67%	761
Fotal Cotal		1,297

#### Northern Michigan's Prescription and Over-the-Counter Drug Drop-off Participant Survey Results



#### Introduction

This summary provides the results of data collection conducted as part of a grant funded by the Michigan Department of Environmental Quality Pollution Prevention Program. Data was collected from individuals using Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program. The POD Program is a multicounty-wide medication drug-take back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. The POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties and over 20 permanent drop boxes at law enforcement agencies throughout Northern Michigan. In 2013, Tip of the Mitt Watershed Council obtained a grant to conduct an education and outreach and media campaign to enhance the POD Program. The data collection results help evaluate the disposal behaviors of residents in Northern Michigan as well as the success of the grant project.

#### Study Method

Data collection was conducted on individuals participating in the Northern Michigan POD Program. Data was collected at community collection events and four permanent drop box locations throughout 2014-2015 to obtain information on medicine disposal behavior in Northern Michigan. Staff at Tip of the Mitt Watershed Council, in coordination with POD Partner organizations and agencies, assisted in questionnaire development, managed the data collection process, and conducted data analysis. At community collection events, event staff and volunteers were responsible for collecting data by personally surveying individual participants. At four permanent drop box sites – Antrim County Sheriff's office, Charlevoix County Sheriff's Office, Petoskey Department of Public Safety, and Cheboygan County Sheriff's Office – individuals disposing of unwanted medications were able to fill out a voluntary survey. Data was collected on the following: who medications belong to, type of materials being disposed of, reason for disposal, use and awareness of the POD Program, disposal preference and factors influencing that decision, and some demographic data.

A total of 431 individuals provided data. This does not represent all individuals using the POD Program during 2014 and 2015. Rather, this was meant to be a representative sample to evaluate the use of the POD Program and recent education, outreach, and media efforts.

General conclusions from these 431 individuals is below and actual data collection results are also provided.

#### Results

#### Type of Material/Medication

Most of the materials being disposed of are prescription pharmaceuticals and over-the-counter medications. An estimated 1/3 of materials are controlled substances, such as OxyContin, Morphine,

Hydrocodone, and other drugs that are regulated by the federal government due to high risk for abuse and addiction. Personal care products represent another estimated 1/3 of materials dropped off for disposal.

#### Who the Medicine Belongs To

Medications being disposed of at both the community collection events and the POD boxes overwhelmingly belong to the individual actually dropping them off or a member of their family or household. Pet medication represented approximately 5-10% of the medicines disposed of. A much lower percentage of individuals were disposing of medications on behalf of a friend or another household. These results do not vary significantly between type of disposal method (event or permanent box) or by year.

#### Reason for Disposal

As expected, the primary reason individuals dispose of medications is because they are expired or are no longer needed due to reasons such as improved health, prescription changes, etc. Death of a family member or friend accounts for a small percentage of disposal, ranging from 7-11%.

#### Method of Disposal

Participants were asked how unwanted or expired medications were disposed of previously. A significant number of people using the community collection event had previously disposed of medicines at a POD collection event. The number of repeat participants increased over the years. In 2013, 34% of participants had previously used a POD community collection event for medicine disposal. In 2014, the percentage increased to 38% and it increased to 50% in 2015. This indicates that individuals using the POD Program are likely to continue to do so into the future. In addition, while previous use of the POD Program increased, disposal via the toilet and trash decreased.

#### Disposal Preference

As noted above, individuals who participate in community collection events are likely to use this method again in the future. The justification for why the community collection event is preferred is convenience.

#### Awareness of POD Boxes

Only about half of individuals that participate in community collection events are aware that permanent drop boxes are also available for disposal of unwanted and expired medication.

#### How One Knew About the Event/Box

The primary way in which individuals heard about POD collection events is through the newspaper, followed by flyers and brochures distributed throughout the community. Word of mouth is primarily how individuals heard about the POD box.

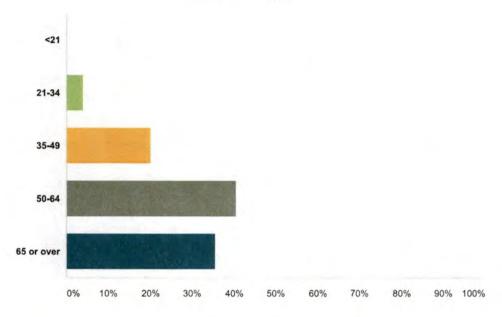
#### Demographics

- Gender: Approximately 65-70% of individuals who participate in the community collection events are female.
- Age: The vast majority of participants at collection events are older. Approximately 40%-42% of
  participants are in the age range of 50-64 and 33%-36% are 65 and older. This represents an estimate as
  surveyors do not directly ask this question to participants, but rather estimate.

# 2014 POD Collection Events Survey Results

## Age of participant (surveyor only)

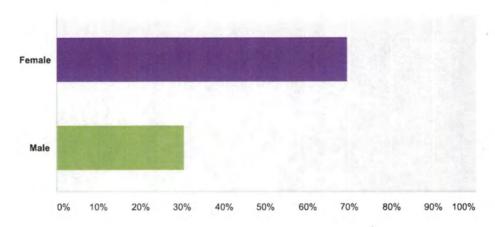
Answered: 180 Skipped: 51



nswer Choices	Responses	
<21	0.00%	0
21-34	3.89%	7
35-49	20.00%	36
50-64	40.56%	73
65 or over	35.56%	64
otal Respondents: 180		

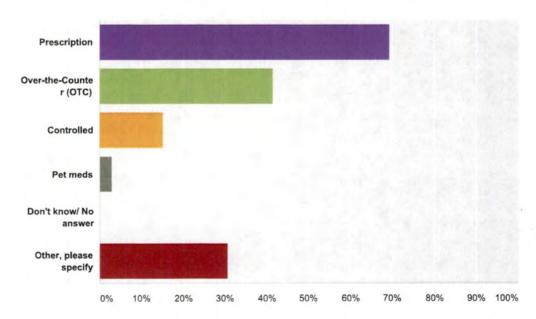
#### Male or Female? (surveyor only)

Answered: 184 Skipped: 47



Female 69.57%	
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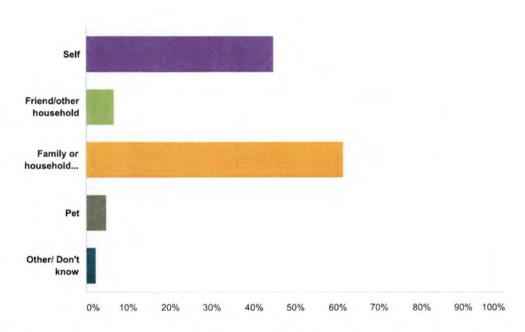
## Type of medication?(surveyor only)



swer Choices	Responses	
Prescription	69.32%	122
Over-the-Counter (OTC)	41.48%	73
Controlled	15.34%	27
Pet meds	2.84%	5
Don't know/ No answer	0.00%	0
Other, please specify	30.68%	54
al Respondents: 176		

## The medicine dropped off today belongs to:

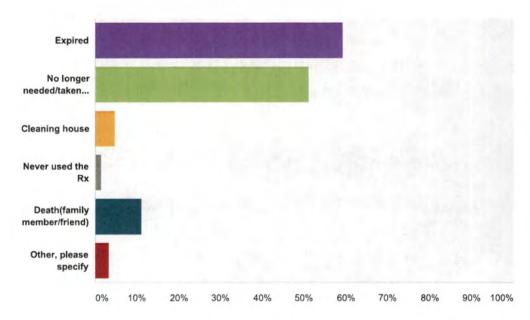
Answered: 210 Skipped: 21



nswer Choices	Responses	
Self	44.76%	94
Friend/other household	6.67%	14
Family or household member	61.43%	129
Pet	4.76%	10
Other/ Don't know	2.38%	5
otal Respondents: 210		

## Reason for disposal?

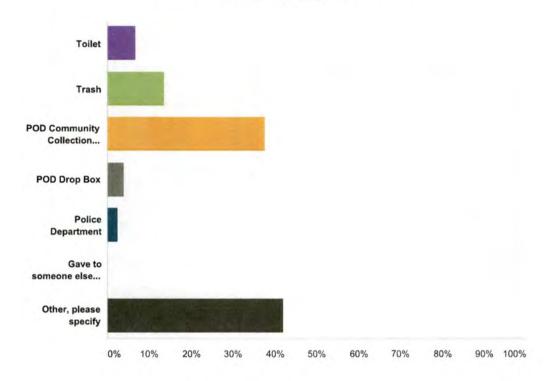
Answered: 209 Skipped: 22



nswer Choices	Responses	
Expired	59.33%	124
No longer needed/taken off/changed Rx	51.20%	107
Cleaning house	4.78%	10
Never used the Rx	1.44%	3
Death(family member/friend)	11.00%	23
Other, please specify	3.35%	7
otal Respondents: 209		

# Before today, how did you dispose of expired/unwanted medications?

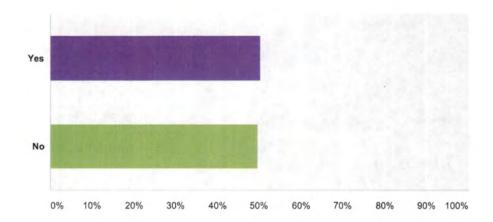
Answered: 207 Skipped: 24



swer Choices	Responses	
Toilet	6.76%	14
Trash	13.53%	28
POD Community Collection Event	37.68%	78
POD Drop Box	3.86%	
Police Department	2.42%	
Gave to someone else for use	0.00%	(
Other, please specify	42.03%	87
tal Respondents: 207		

# Are you aware that there are permanent drop boxes at several locations within the area?

Answered: 203 Skipped: 28

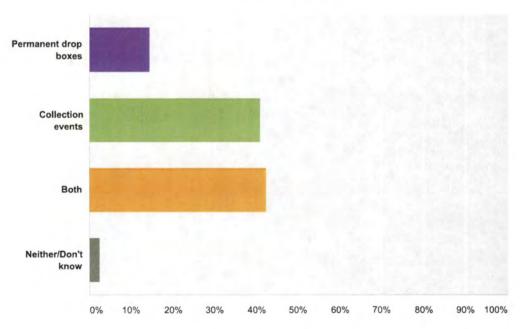


Answer Choices	Responses	
Yes	50.25%	102
No	49.75%	101
otal		203

# In the future, would you prefer to use the permanent collection boxes or the POD

## Community Collection events?

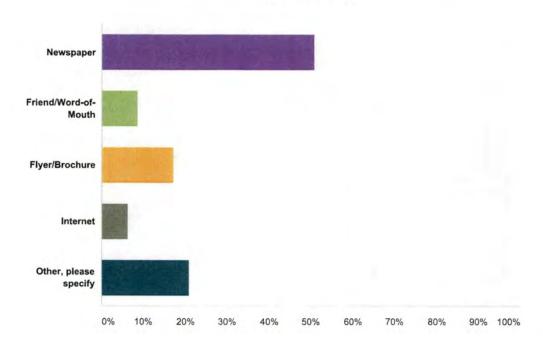
Answered: 208 Skipped: 23



nswer Choices	Responses	
Permanent drop boxes	14.42%	30
Collection events	40.87%	85
Both	42.31%	88
Neither/Don't know	2.40%	5
otal		208

## How did you hear about this event?

Answered: 211 Skipped: 20

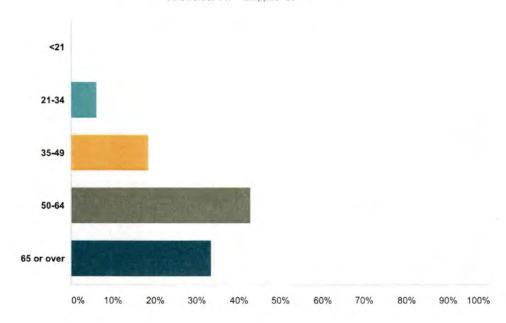


nswer Choices	Responses	
Newspaper	50.71%	107
Friend/Word-of-Mouth	8.53%	18
Flyer/Brochure	17.06%	36
Internet	6.16%	13
Other, please specify	20.85%	44
otal Respondents: 211		

## 2015 POD Collection Events Survey Results

## Age of participant (surveyor only)

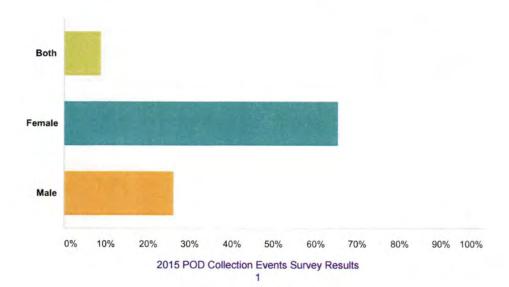
Answered: 147 Skipped: 26



nswer Choices	Responses	
<21	0.00%	0
21-34	6.12%	. 9
35-49	18.37%	27
50-64	42.86%	63
65 or over	33.33%	49
otal Respondents: 147		

### Male or Female? (surveyor only)

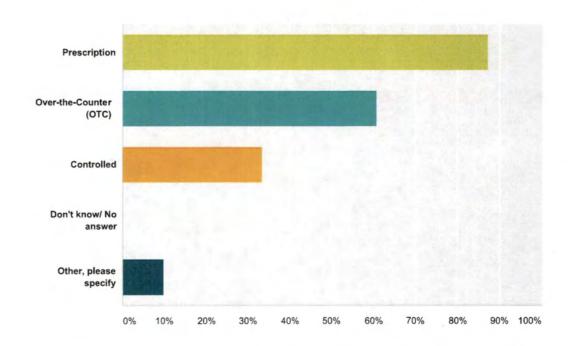
Answered: 150 Skipped: 23



Answer Choices	Responses	
Both	8.67%	13
Female	65.33%	98
Male	26.00%	39
otal		150

## Type of medication?(surveyor only)

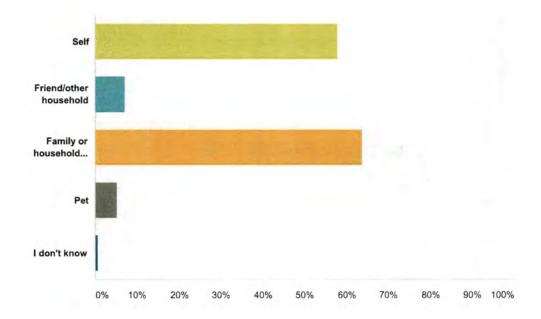
Answered: 102 Skipped: 71



nswer Choices	Responses	
Prescription	87.25%	89
Over-the-Counter (OTC)	60.78%	62
Controlled	33.33%	34
Don't know/ No answer	0.00%	0
Other, please specify	9.80%	10
otal Respondents: 102		

## The medicine dropped off today belongs to:

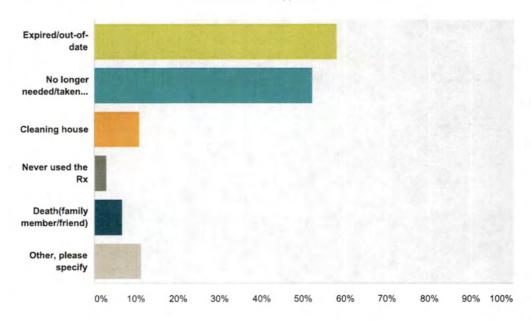
Answered: 154 Skipped: 19



nswer Choices	Responses	
Self	57.79%	89
Friend/other household	7.14%	11
Family or household member	63.64%	98
Pet	5.19%	8
I don't know	0.65%	1
otal Respondents: 154		

## Reason for disposal?

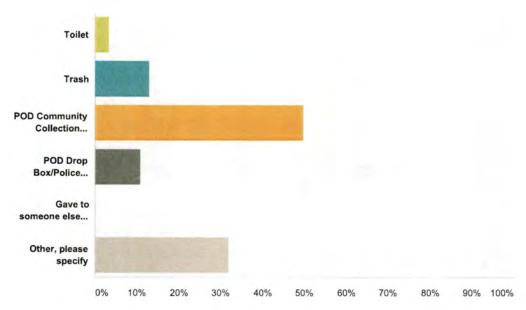
Answered: 167 Skipped: 6



wer Choices	Responses	
Expired/out-of-date	58.08%	97
No longer needed/taken off/changed Rx	52.10%	87
Cleaning house	10.78%	18
Never used the Rx	2.99%	5
Death(family member/friend)	6.59%	11
Other, please specify	11.38%	19
al Respondents: 167		-

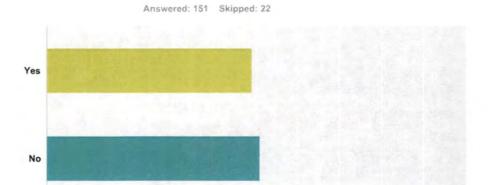
# Before today, how did you dispose of expired/unwanted medications?





nswer Choices	Responses	
Toilet	3.40%	5
Trash	12.93%	19
POD Community Collection Event	49.66%	73
POD Drop Box/Police Department	10.88%	16
Gave to someone else for use	0.00%	0
Other, please specify	31.97%	47
otal Respondents: 147		

# Are you aware that there are permanent drop boxes at several locations within the



50%

60%

70%

80%

90% 100%

Answer Choices	Responses	
Yes	49.01%	74
No	50.99%	77
Total Respondents: 151		A CONTRACTOR

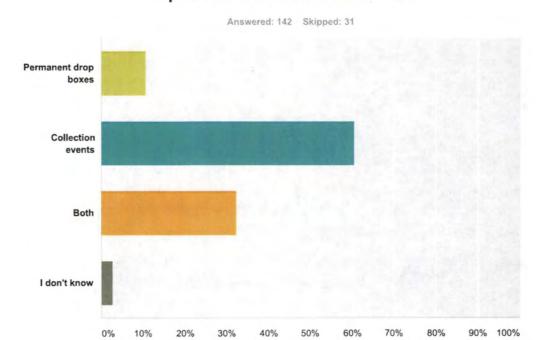
40%

10%

20%

30%

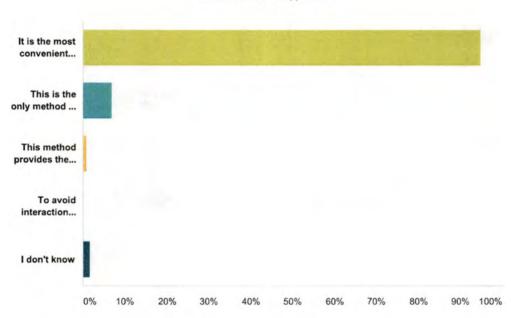
## How do you prefer to dispose of expired/unwanted medications?



swer Choices	Responses	
Permanent drop boxes	10.56%	15
Collection events	60.56%	86
Both	32.39%	46
I don't know	2.82%	4
tal Respondents: 142		

# Why do you prefer this method of disposal?

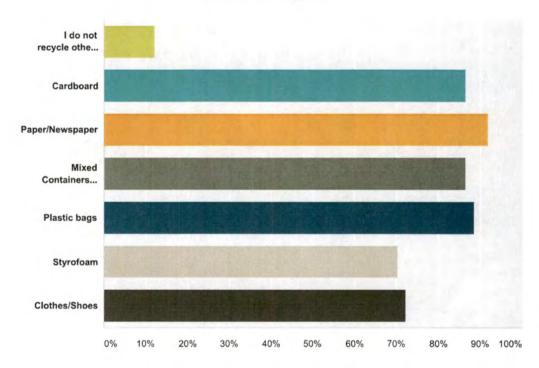
Answered: 115 Skipped: 58



swer Choices	Responses	
It is the most convenient method	94.78%	109
This is the only method I'm aware of	6.96%	8
This method provides the most privacy	0.87%	1
To avoid interaction with law enforcement	0.00%	0
I don't know	1.74%	2
tal Respondents: 115		

## What other materials do you recycle?

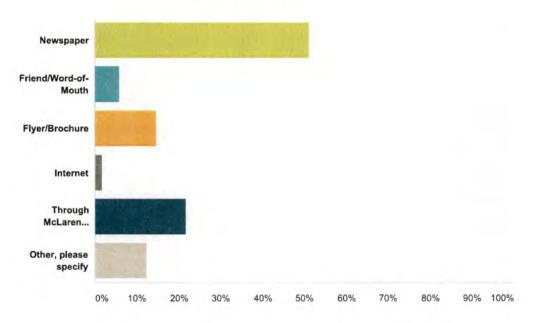
Answered: 148 Skipped: 25



nswer Choices	Responses	
I do not recycle other materials	12.16%	18
Cardboard	86.49%	128
Paper/Newspaper	91.89%	136
Mixed Containers (glass, metal, plastic)	86.49%	128
Plastic bags	88.51%	131
Styrofoam	70.27%	104
Clothes/Shoes	72.30%	107
etal Respondents: 148		

## How did you hear about this event?





swer Choices	Responses	
Newspaper	51.18%	8
Friend/Word-of-Mouth	5.88%	1
Flyer/Brochure	14.71%	2
Internet	1.76%	
Through McLaren (hospital)	21.76%	3
Other, please specify	12.35%	2
tal Respondents: 170		

## 2014-2015 POD Box Survey Results

# Who does the medication dropped off today belong to?



nswer Choices	Responses	
Did not dispose of medications today	1.52%	1
Self or household member	65.15%	43
Friend or other household	15.15%	10
Pet	9.09%	6
Other	18.18%	12
otal Respondents: 66		

60%

90% 100%

Other

10%

20%

30%

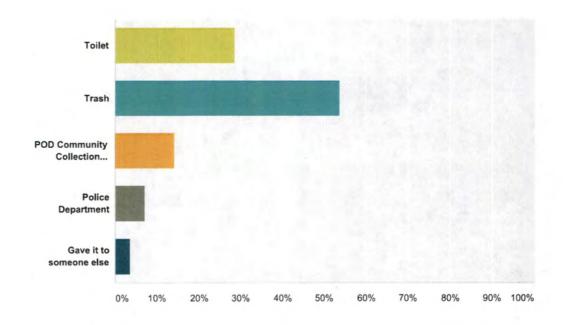
# How many times have you disposed of medication in the POD before today?

Answered: 28 Skipped: 39

swers	# of mentions
Numerous/Multiple	5
1-5 times	23
6-10 times	.4
More than 10	2

# How did you dispose of expired/unwanted medications before today?

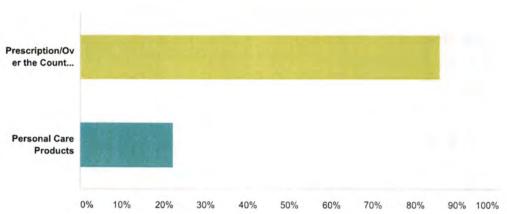
Answered: 28 Skipped: 39



nswer Choices	Responses	
Toilet	28.57%	8
Trash	53.57%	15
POD Community Collection Event	14.29%	4
Police Department	7.14%	2
Gave it to someone else	3.57%	1
otal Respondents: 28		

# What types of medications/materials did you dispose of?



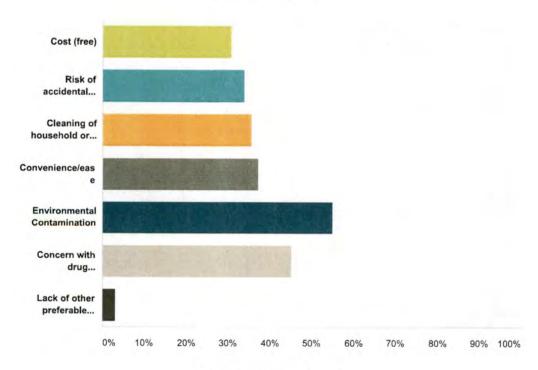


Answer Choices	Responses	
Prescription/Over the Counter Medications	85.71%	54
Personal Care Products	22.22%	14
Total Respondents: 63		

# What factors impacted your decision to dispose of medications using the POD

### Box?

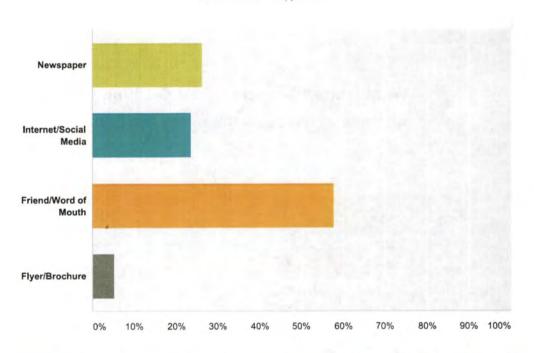
Answered: 62 Skipped: 5



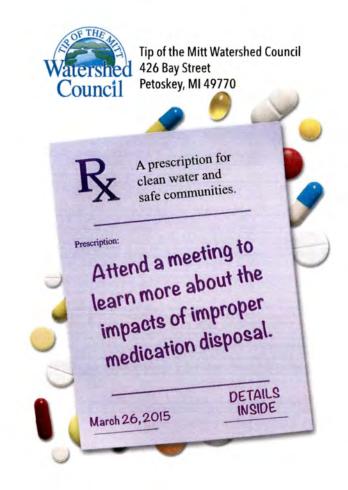
swer Choices	Responses	
Cost (free)	30.65%	19
Risk of accidental poisoning	33.87%	2
Cleaning of household or medicine cabinet	35.48%	22
Convenience/ease	37.10%	2
Environmental Contamination	54.84%	3-
Concern with drug misuse/abuse	45.16%	28
Lack of other preferable options	3.23%	:
al Respondents: 62		

# How did you hear about this POD Collection box?

Answered: 38 Skipped: 29



nswer Choices	Responses	
Newspaper	26.32%	10
Internet/Social Media	23.68%	9
Friend/Word of Mouth	57.89%	22
Flyer/Brochure	5.26%	2
otal Respondents: 38		







Support for this meeting generously provided by Michigan Department of Environmental Quality, Community Pollution Prevention Program.



#### moo.boqehTnlslliq.www

For more information about the POD Program, visit



# DO YOU KNOW

the impacts of improper medication disposal?





You're invited to learn more on March 26th





Tip of the Mitt Watershed Council invites you to attend

## Proper Management & Disposal of Unwanted Patient Medications



Thursday, March 26, 2015 10:00 am - 12:00 pm

North Central Michigan College Library Conference Room 1515 Howard Street Petoskey, Michigan 49770

Presented in partnership with: HARBOR, Inc. Health Department of Northwest Michigan Petoskey Department of Public Safety



Patients often accumulate many medications. When a patient dies, what happens to those medications? Do you know what happens if medication is flushed down a toilet? Do you know that there are public health and environmental impacts of improper disposal of medications? Proper pharmaceutical disposal is a challenge that needs to be addressed to both reduce misuse of pharmaceuticals and to protect our waters.

At this meeting, you will learn about the impacts of improper disposal of pharmaceuticals and you'll discover the available pharmaceutical disposal options in Northern Michigan. This meeting will give you the tools and information you need to take care of your clients, their families, and our environment. **And best of all, it's free.** Register today.

### **Targeted Audience:**

Palliative caregivers, staff from funeral homes, nursing homes, medical centers, and senior centers, and anyone interested in learning about proper disposal of medications.

### **Objectives:**

- Understand the environmental and social burdens of pharmaceutical waste
- Learn about disposal options in our community
- Gain resources to advocate for proper medication disposal with patients and their families.

#### Speakers:

- Rachel Smolinski, Executive Director, HARBOR, Inc.
- Susan Pulaski, Community Health Coordinator, Health Department of Northwest Michigan
- John Calabrese, Director of Public Safety, Petoskey Department of Public Safety
- · Jennifer McKay, Policy Specialist, Tip of the Mitt Watershed Council

## Please RSVP by March 23rd

To register or for more information, contact Jennifer McKay at 231-347-1181 or jenniferm@watershedcouncil.org





# Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, Mi 49770 • phone: (231) 347-1181 • fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

### FOR IMMEDIATE RELEASE

October 30, 2013

Contact: Jennifer McKay
(231) 347-1181 ext. 114
jenniferm@watershedcouncil.org

### Watershed Council Receives Grant To Enhance Pharmaceutical Collection and Disposal Program

Petoskey, MI – Tip of the Mitt Watershed Council recently received a grant in the amount of \$99,795.67 from the Community Pollution Prevention Grant program, Michigan Department of Environmental Quality (MDEQ) to expand Northern Michigan's Pharmaceutical and Over-the Counter Drug Drop-Off (POD) Program. The POD Program was initiated to address the growing concern of unused and expired pharmaceuticals polluting our waterways, poisoning our children, and putting our public safety at risk.

The Prescription and Over-the-Counter Drug Drop-Off Program or POD Program is a multicounty-wide medication drug take back initiative to provide a convenient location for residents to properly dispose of prescription and over-the-counter medications. The POD Program includes community collection events in Emmet, Antrim, Cheboygan, and Charlevoix Counties. The POD Program also includes 21 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter pharmaceuticals, and personal care products for free. This is currently the only program in Northern Michigan that can take back controlled substances.

Throughout the nation, water bodies are being polluted with pharmaceutical drugs. Trace amounts of pharmaceutical drugs have been detected in the drinking water sources of an estimated 41 million Americans. A study by the United States Geological Survey found trace amounts of pharmaceuticals in 80 percent of streams and rivers that were tested. Pharmaceutical contaminants are a steady source of chemical exposure for aquatic species, and affect the quality of the waters we rely upon for drinking and look to for recreation.

Improper disposal of drugs not only contaminates our water resources, but also is a public health and safety concern. Prescription drug abuse is the fastest growing drug problem in the United States. The 2010 National Survey on Drug Use and Health estimates that 7 million persons aged twelve or older used prescription drugs including pain relievers, anti-anxiety medications, stimulants, and sedatives non-medically in the previous month. This non-medical prescription drug use is having a devastating effect on communities throughout the country. According to the Centers for Disease Control and Prevention, poisoning deaths, which include drug overdoses

from prescription drugs, are the leading cause of injury death in the United States; nearly nine out of ten poisoning deaths are caused by drugs.

The MDEQ Community Pollution Prevention grant will provide funding to enhance the program by conducting targeted education and outreach to reach key audiences and through development of a focused media campaign. The result will be increased awareness, access, and use of the POD Program by Northern Michigan community members. Through this project, we will be able to reduce the quantity of pharmaceuticals and personal care products entering Michigan's surface, ground, and drinking waters, as well as support law enforcement's efforts to keep these drugs out of the hands of people who will sell them, abuse them, and commit crimes while under their influence.

POD Organizations and Partners: Harbor Area Regional Board of Resources (HARBOR), Inc., Emmet County Household Chemical Drop-Off Program, Little Traverse Bay Bands of Odawa Indians, Tip of the Mitt Watershed Council, McLaren Northern Michigan, Charlevoix County Recycling Program, Charlevoix County Conservation District, Northwest Michigan Community Health Agency, Charlevoix County, and numerous law enforcement agencies.

For more information about the Prescription and Over-the-Counter Drug Drop-off Program or how to properly dispose of medications, visit www.watershedcouncil.org or call Tip of the Mitt Watershed Council at (231) 347-1181.

#### ###

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## Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, M1 49770 • phone: (231) 347-1181• fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

### FOR IMMEDIATE RELEASE

April 8, 2014

Contact: Jennifer McKay

(231)347-1181

jenniferm@watershedcouncil.org

#### 2014 POD DROP-OFF DAYS SCHEDULED

Prescription and Over-the-Counter Drug Drop-Off Days (POD) will be held throughout 2014 as an opportunity for residents to safely dispose of their unwanted and unused pharmaceuticals for free.

POD Collection Events are scheduled for:

- Tuesday, April 22 from 7am 4pm
   McLaren Northern Michigan, Petoskey Campus (Hospital Circle Driveway Entrance off Mitchell Street across from Johan's Bakery)
- Thursday, April 24 from 10am 2pm
   McLaren Northern Michigan, Cheboygan Campus (Entrance North of the Emergency Department)
- Saturday, April 26 from 10am 2pm
   In front of Antrim County Courthouse (E. Cayuga Street, Bellaire)
- Saturday, July 26 from 9am -12pm
   Emmet County Drop-Off Center (7363 Pleasantview Road, Harbor Springs)
- Saturday, September 6 from 9am -2pm
   Boyne City Road Commission Garage (Just east of the Boyne City Public School football field)
- Wednesday, October 15 from 7am 4pm
   McLaren Northern Michigan, Petoskey Campus (Hospital Circle Driveway Entrance off Mitchell Street across from Johan's Bakery)

Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan's waters, community, and families. *Put Your Pills In the POD!* The best solution is to dispose of old and expired medications through Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program.

Properly disposing of unused medicines at POD collection events reduces the risk that prescriptions will be mishandled and end up on the street, prevents avoidable poisoning of both children and adults, and prevents contamination of water resources.

Residents are encouraged to bring prescription medicines and over-the-counter pharmaceuticals to any of the POD collection events. We request that residents keep the medicines in the original

container for easy identification of the medicine but erase or black out all personal information from the prescription bottles. The POD events are unique in the area in that they accept all prescription drugs, including those classified as controlled substances. Pills, liquids, ointments, lotions, and even pet medications are all accepted at the events.

The service is being organized and paid for by a group of leading local institutions united in their concern about the public health, public safety, and environmental effects of holding on to, flushing, or landfilling unwanted drugs. Group members include McLaren Northern Michigan, Emmet County Household Chemical Drop-off Program, Little Traverse Bay Bands of Odawa Indians, Harbor Area Regional Board of Resources (HARBOR), Inc, Tip of the Mitt Watershed Council, Health Department of Northwest Michigan, Charlevoix County Conservation District, Charlevoix County Road Commission, Petoskey Department of Public Safety, Cheboygan County Sheriff, Antrim County Sheriff, and Boyne City Police Department.

In addition to collection events, residents may also dispose of pharmaceuticals at permanent POD Drop Boxes located at law enforcement agencies throughout Northern Michigan. For the locations of the POD Boxes, visit <a href="https://www.PillsInThePOD.com">www.PillsInThePOD.com</a>.

For more information contact Jennifer McKay at Tip of the Mitt Watershed Council at jenniferm@watershedcouncil.org or 231-347-1181.

#### ###

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## Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, MI 49770 • phone: (231) 347-1181 • fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

### FOR IMMEDIATE RELEASE

July 11, 2014

Contact: Jennifer McKay

(231) 347-1181

ienniferm@watershedcouncil.org

Put Your Pills in the POD! Emmet County Drug Collection Event on July 26th

PETOSKEY – To help citizens properly dispose of unwanted or expired medicines, there is an upcoming POD (Prescription and Over-the-Counter Drug Drop-Off) collection event in Harbor Springs. This collection event will take place at the Emmet County Drop-Off Center, 7363 Pleasantview Road, on Saturday, July 26, from 9 a.m. to 2 p.m..

This is an environmentally safe, convenient, and free way to dispose of unwanted and expired pills. Area residents can bring unused or expired prescriptions and over-the-counter medications in the original containers including pills, liquids, ointments, lotions, and even pet medications.

"Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan waters, community, and families," said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council. "By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, residents will help us keep our rivers and drinking water clean and our communities and families safe."

Traditional methods for disposing of unused medicines – flushing them down the toilet or throwing them in the trash – pose potential safety and health hazards and should be avoided. Medicines that languish in home cabinets are highly susceptible to misuse and abuse. Rates of prescription drug abuse in the U.S. are increasing, as are the number of accidental poisonings and overdoses due to these drugs. Studies show a majority of abused prescription drugs are obtained from family and friends, including from the home medicine cabinet.

Residents may also dispose of medicines throughout the year at permanent POD Drop-off Boxes, located at law enforcement agencies throughout Northern Michigan. For more information, including drop-off locations, visit www.pillsinthepod.com.

#### ###

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### FOR IMMEDIATE RELEASE

August 14, 2014

Contact: Kristy Beyer

(231) 347-1181

kristy@watershedcouncil.org

### NCMC Students Produce Animated Commercial for POD Program

Petoskey, MI – Students in North Central Michigan College's "Special Topic in Animation" class produced a 30-second animated commercial for the Northern Michigan Prescription and Over-the-Counter Drug Drop-Off (POD) Program. The commercial began airing this month July on local broadcast television stations.

The commercial is part of a new "Put Your Pills in the POD!" media and education campaign led by Tip of the Mitt Watershed Council to raise awareness about the POD Program.

The POD Program is a multicounty pharmaceutical take-back initiative to provide a convenient and environmentally sound way for residents to properly dispose of unwanted and unused medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan.

Class instructor, Anne Morningstar, said "This project came at a perfect time for the students. The level of responsibility that is expected when working with a client can be very intimidating. Each and every one of these students stepped up and showed that they are prepared to create professional-level work for real world clients."

"The opportunity to work with a real client was an eye-opening experience," said Michael Harlan. "It was an unbelievable experience and I was glad to take part in a project of this magnitude this early in my schooling."

"The most challenging part was the amount of work that goes into creating one second of footage" commented Logan Ward. "But when you see the finished product it makes it all worthwhile."

Kristy Beyer, Director of Communications at Tip of the Mitt Watershed Council, was extremely pleased with the outcome. "The students were able to learn about the POD program and then use their artistic talents to convey the program's importance to the community through animation," said Beyer. "It was a wonderful partnership and we hope to do it again with future classes."

The commercial focuses on the harm that flushing your unwanted and unused pills down the toilet or sink can have to the health of our surface and drinking waters.

Over 80% of waterways tested in the United States show traces of common medications, such as acetaminophen, hormones, blood pressure medicine, codeine, and antibiotics. Additionally, an investigation by the Associated Press found that drugs are also in the drinking water supplies of 41 million Americans.

Although these contaminants are found at very low levels, we do not know their long-term effects on animal populations that were never intended to ingest those compounds. Many animals get a daily dose of medications at their local watering hole. Even worse, fish and other aquatic animals are constantly exposed to the pharmaceutical mixture. Some of these chemicals interfere with or mimic natural hormones and disrupt reproduction, development, and behavior of fish and other organisms.

The commercial is part of a grant project supported by the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program and can be viewed online at www.PillsInThePod.com.

#### ###

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#### PHOTO ATTACHED:

#### Caption:

Animation students from North Central Michigan College pause for a picture while producing a new 30-second animated commercial to generate awareness for Tip of the Mitt Watershed Council's Prescription and Over-the-Counter Drug (POD) program. Their commercial is currently running on local television stations through December. Pictured (left to right): Logan Ward, Michael Harlan, Shelby Stevens, and Joey Anderson.





# Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, MI 49770 • phone: (231) 347-1181• fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

### FOR IMMEDIATE RELEASE

August 27, 2014

Contact: Jennifer McKay

(231) 347-1181

jenniferm@watershedcouncil.org

#### Put Your Pills in the POD!

#### Charlevoix County Drug Collection Event on September 6th

PETOSKEY – To help citizens properly dispose of unwanted or expired medicines, there is an upcoming POD (Prescription and Over-the-Counter Drug Drop-Off) collection event in Boyne City. This collection event will take place at the Boyne City Road Commission Garage, just east of Boyne City Public School football field, on Saturday, September 6, from 9 a.m. to 1 p.m..

This is an environmentally safe, convenient, and free way to dispose of unwanted and expired pills. Area residents can bring unused or expired prescriptions and over-the-counter medications in the original containers including pills, liquids, ointments, lotions, and even pet medications.

"Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan waters, community, and families," said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council. "By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, residents will help us keep our rivers and drinking water clean and our communities and families safe."

Traditional methods for disposing of unused medicines – flushing them down the toilet or throwing them in the trash – pose potential safety and health hazards and should be avoided. Medicines that languish in home cabinets are highly susceptible to misuse and abuse. Rates of prescription drug abuse in the U.S. are increasing, as are the number of accidental poisonings and overdoses due to these drugs. Studies show a majority of abused prescription drugs are obtained from family and friends, including from the home medicine cabinet.

Residents are encouraged to bring prescription medicines and over-the-counter pharmaceuticals to the POD collection events. We request that residents keep the

medicines in the original container for easy identification of the medicine but erase or black out all personal information from the prescription bottles.

The service is being organized and paid for by a group of leading local institutions united in their concern about the public health, public safety, and environmental effects of holding on to, flushing, or landfilling unwanted drugs. Group members include: Charlevoix County Conservation District, Charlevoix County Road Commission, Boyne City Police Department, Tip of the Mitt Watershed Council, Health Department of Northwest Michigan, Little Traverse Bay Bands of Odawa Indians, and Harbor Area Regional Board of Resources (HARBOR), Inc.

Residents may also dispose of medicines throughout the year at permanent POD Drop-off Boxes, located at law enforcement agencies throughout Northern Michigan. For more information, including drop-off locations, visit <a href="https://www.pillsinthepod.com">www.pillsinthepod.com</a>.

#### ###

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### FOR IMMEDIATE RELEASE

December 12, 2014

Contact: Jennifer McKay

(231) 347-1181

jenniferm@watershedcouncil.org

#### Collaboration Makes POD Program Successful at Protecting Our Waters

PETOSKEY – The Tip of the Mitt Watershed Council's mission is to protect our lakes, streams, wetlands, and groundwater through respected advocacy, innovative education, technically sound water quality monitoring, thorough research, and restoration actions. We achieve our mission by empowering others and we believe in the capacity to make a positive difference. One program in particular exemplifies this: the Prescription and Over-the-Counter Drug Drop-Off Program, or POD Program.

The POD Program is a multicounty-wide medication drug-take back initiative that provides a convenient and environmentally sound way for Northern Michigan residents to properly dispose of medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter pharmaceuticals, and personal care products for free. Through the POD Program and properly disposing of unwanted pharmaceuticals and drugs, we are keeping our rivers and drinking water clean and our communities and families safe.

This program is a perfect example of how empowering others can make a positive difference and ensure clean water for future generations. Working together with a group of leading local institutions united in their concern about the public health, public safety, and environmental effects, we have been able to develop, maintain, and enhance the way our program works to provide the most benefit to our Northern Michigan community and waters. Without the collaboration, dedication, and commitment of each of these partners, including HARBOR, Inc., Little Traverse Bay Bands of Odawa Indians, Emmet County Department of Public Works, McLaren Northern Michigan, Northwest Michigan Community Health Agencies, and numerous law enforcement agencies, the POD Program would not be possible.

But the success of the POD Program also hinges on the citizens of Northern Michigan who use the services to properly dispose of unwanted and unused medications. The community can and is making a positive difference for the health of our waters – a very significant difference. In 2014, residents disposed of over 4,500 pounds of unwanted and

expired medicines and personal care products. That is over 2 tons, or the weight of a typical hippopotamus or rhinoceros. This is an increase of over 1,000 pounds disposed of in 2013.

Through community collection events and permanent drop boxes at local law enforcement offices, over 13,000 pounds of unused and unwanted medicines and personal care products have been collected and disposed of properly since the inception of the program in 2008. This includes over 250 pounds of controlled substances, which are drugs such as OxyContin, Morphine, and Hydrocodone, which are regulated by the federal government due to high risk for abuse and addiction. With each pound collected, we are providing greater protection to our water resources as well as the public health and safety of our residents and visitors

The POD Program continues to grow and is being replicated elsewhere in the State. This is a true testament to the partners who have made this program possible and to all the residents who use the program. Together, we have made a difference in the quality of life in Northern Michigan.

For more information about the POD Program or drop-off locations, visit www.pillsinthepod.com.

#### ###

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## CHEBOYGAN COUNTY SHERIFF DEPARTMENT

DALE V. CLARMONT SHERIFF

TIMOTHY C. COOK UNDERSHERIFF

870 S. Main St. Cheboygan, MI 49721

231-627-3155 Fax: 231-627-8880 sheriff@cheboygancounty.net Brenda Beckwith Jail Administrator

Jodi Beauchamp Administrative Assistant

#### PRESS RELEASE

FOR IMMEDIATE RELEASE February 6, 2015

CONTACT DALE CLARMONT Sheriff, Cheboygan County

Cheboygan County-

Sheriff Dale Clarmont initiated a prescription drug drop box in 2009 due to the growing problem of drug abuse with prescription drugs. "Eighty percent of those in our jail are there because of drug related crimes. The more we can do to get prescription drugs off the street the better, which is why we added the drop off box in our lobby "said Clarmont.

The drug drop box is a no questions asked, simply come in to the Cheboygan County Sheriff Department Lobby and place your extra and outdated prescription drugs in the box. The drugs are then disposed of. "This allows parents and grandparents to have a proper way to dispose of their prescriptions so they don't get into the wrong hands. We have learned in many cases that pills have been easily accessible in the medicine cabinets therefore we encourage those who have prescription drugs, especially opiate based, to store them in a safe or somewhere where they are not easily accessible or visible" said Clarmont.

Because many of these drugs can become an environmental hazard, the Sheriff encourages the public to drop of their drugs and not throw them away or flush them. Twice a year the drugs are collected from participating units by Northern Michigan law enforcement agencies who take turns transporting the collected drugs to the Kent County incinerator for proper disposal.

"Over the years we have averaged between 500 and 800 pounds of prescriptions drugs per year and this year we were at 566 pounds that was properly disposed of, that is a lot of pills that don't reach our streets or dumped into our environment" said Clarmont.

Cheboygan County Sheriff is an equal opportunity provider and employer. TDD# 1-800-649-3777

Contact: Jennifer McKay, Policy Specialist Tip of the Mitt Watershed Council jenniferm@watershedcouncil.org (231) 347-1181 x.114

## **Proper Disposal of Unwanted Patient Medications**

**WHAT:** Proper Disposal of Unwanted Patient Medications Meeting

WHEN: Thursday, March 26, 2015 10:00 a.m.-12:00 p.m.

WHERE: North Central Michigan College

Library Conference Room

1515 Howard Street

Petoskey, Michigan 49770

WHO/WHY: This event is designed to help caregivers, staff from funeral homes, nursing

homes, medical centers, and senior centers learn more about medication disposal options in our community and gain resources to advocate for proper disposal

with patients and their families.

**COST:** Free of charge

Date: March 5, 2015

RSVP: Contact Jennifer McKay at jenniferm@watershedcouncil.org or call

231.347.1181

Tip of the Mitt Watershed is hosting a Proper Disposal of Unwanted Patient Medications Meeting to provide valuable information about the environmental and social burdens of pharmaceutical waste. Patients often accumulate many medications. When a patient no longer needs a medication or dies, what happens to those medications? Do you know what happens if medication is flushed down a toilet? Do you know that there are public health and environmental impacts of improper disposal of medications? Proper pharmaceutical disposal is a challenge that needs to be addressed to both reduce misuse of pharmaceuticals and to protect our waters.

At this meeting, you will learn about the impacts of improper disposal of pharmaceuticals and the Prescription and Over-the-Counter Drug Drop-Off (POD) disposal options in Northern Michigan. This meeting will give you the tools and information you need to take care of your clients, their families, and our environment.

#### Speakers include:

- John Calabrese, Director of Public Safety, Petoskey Department of Public Safety
- Rachel Smolinski, Executive Director, HARBOR, Inc.
- Susan Pulaski, Community Health Coordinator, Health Department of Northwest Michigan
- Jennifer McKay, Policy Specialist, Tip of the Mitt Watershed Council

Please register for the event by March 23<sup>th</sup>. For register or for more information, contact Jennifer McKay at (231) 347-1181 ext. 114 or <u>jenniferm@watershedcouncil.org</u>.



# Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, MI 49770 • phone: (231) 347-1181 • fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

# FOR IMMEDIATE RELEASE

April 6, 2015

Contact: Jennifer McKay

(231)347-1181

jenniferm@watershedcouncil.org

### 2015 POD DROP-OFF DAYS SCHEDULED

Prescription and Over-the-Counter Drug Drop-Off Days (POD) will be held throughout 2015 as an opportunity for residents to properly dispose of their unwanted and unused medications for free.

POD Collection Events are scheduled for:

- Tuesday, April 21, 10:00 am 2:00 pm
   McLaren Northern Michigan, Cheboygan Campus (Entrance North of the Emergency Department)
- Wednesday, April 22, 7:00 am 4:00 pm
   McLaren Northern Michigan, Petoskey Campus
   (Hospital Circle Driveway Entrance off Mitchell Street across from Johan's Bakery)
- Saturday, April 25, 10:00 am 2:00 pm
   In front of Antrim County Courthouse, 205 E. Cayuga Street, Bellaire
- Saturday, July 25,9:00 am -12:00 pm
   Emmet County Drop-Off Center, 7363 Pleasantview Road, Harbor Springs
- Saturday, September 12, 9:00 am -1:00 pm
   Boyne City Road Commission Garage
   (Just east of the Boyne City Public School football field)
- Wednesday, October 14, 7:00 am 4:00 pm
   McLaren Northern Michigan, Petoskey Campus
   (Hospital Circle Driveway Entrance off Mitchell Street across from Johan's Bakery)
- Saturday, October 31, 10:00 am 2:00 pm
   In front of Antrim County Courthouse, 205 E. Cayuga Street, Beliaire

Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan's waters, community, and families. *Put Your Pills In the POD!* The best solution is to dispose of old and expired medications through Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program.

Properly disposing of unused medicines at POD collection events reduces the risk that prescriptions will be mishandled and end up on the street, prevents avoidable poisoning of both children and adults, and prevents contamination of water resources.

Residents are encouraged to bring prescription medicines and over-the-counter pharmaceuticals to any of the POD collection events. We request that residents keep the medicines in the original container for easy identification of the medicine but erase or black out all personal information from the prescription bottles. Pills, liquids, ointments, lotions, and even pet medications are all accepted at the events.

The service is made possible through cooperation of the following entities: Antrim County Sheriff, Boyne City Police Department, Charlevoix County Conservation District, Charlevoix County Road Commission Emmet County Household Chemical Drop-off Program, Emmet County Sheriff's Office, HARBOR, Inc., Harbor Springs Police Department, the Health Department of Northwest Michigan Little Traverse Bay Bands of Odawa Indians, McLaren Northern Michigan, Petoskey Department of Public Safety, and Tip of the Mitt Watershed Council.

In addition to collection events, residents may also dispose of unwanted and unused medications at permanent POD Drop Boxes located at law enforcement agencies throughout Northern Michigan. For the locations of the POD Boxes, visit www.PillsInThePOD.com.

For more information contact Jennifer McKay at Tip of the Mitt Watershed Council at <a href="mailto:jenniferm@watershedcouncil.org">jenniferm@watershedcouncil.org</a> or 231-347-1181.

### ###

Tip of the Mitt Watershed Council: Tip of the Mitt Watershed Council speaks for our members including full-time and seasonal residents, lake associations, and businesses. We work to maintain the environmental integrity and economic and aesthetic values of lakes, streams, wetlands, and ground water in Northern Michigan, as well as statewide and throughout the Great Lakes Basin. As the lead organization for water resources protection in Antrim, Chartevoix, Cheboygan, and Emmet Counties, the Watershed Council is working to preserve the heritage of Northern Michigan – a tradition built around our magnificent waters.



# Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, MI 49770 • phone: (231) 347-1181 • fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

# FOR IMMEDIATE RELEASE

July 15, 2015

Contact: Jennifer McKay

(231) 347-1181

jenniferm@watershedcouncil.org

# Put Your Pills in the POD! Emmet County Drug Collection Event on July 25th

PETOSKEY – To help citizens properly dispose of unwanted or expired medicines, there is an upcoming POD (Prescription and Over-the-Counter Drug Drop-Off) collection event in Harbor Springs. This collection event will take place at the Emmet County Drop-Off Center, 7363 Pleasantview Road, on Saturday, July 25, from 9 a.m. to noon.

This is an environmentally safe, convenient, and free way to dispose of unwanted and expired pills. Area residents can bring unused or expired prescriptions and over-the-counter medications in the original containers including pills, liquids, ointments, lotions, and even pet medications.

"Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan waters, community, and families," said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council. "By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, residents will help us keep our rivers and drinking water clean and our communities and families safe."

Traditional methods for disposing of unused medicines – flushing them down the toilet or throwing them in the trash – pose potential safety and health hazards and should be avoided. Medicines that languish in home cabinets are highly susceptible to misuse and abuse. Rates of prescription drug abuse in the U.S. are increasing, as are the number of accidental poisonings and overdoses due to these drugs. Studies show a majority of abused prescription drugs are obtained from family and friends, including from the home medicine cabinet.

Residents may also dispose of medicines throughout the year at permanent POD Drop-off Boxes, located at law enforcement agencies throughout Northern Michigan. For more information or to find a location near you, visit <a href="https://www.pillsinthepod.com">www.pillsinthepod.com</a>.

## ###

Tip of the Mitt Watershed Council: Tip of the Mitt Watershed Council speaks for our members including full-time and seasonal residents, lake associations, and businesses. We work to maintain the environmental integrity and economic and aesthetic values of lakes, streams, wetlands, and ground water in Northern Michigan, as well as statewide and throughout the Great Lakes Basin. As the lead organization for water resources protection in Antrim, Charlevoix, Cheboygan, and Emmet Counties, the Watershed Council is working to preserve the heritage of Northern Michigan – a tradition built around our magnificent waters.



# Tip of the Mitt Watershed Council

426 Bay Street • Petoskey, MI 49770 • phone: (231) 347-1181• fax: (231) 347-5928 email: info@watershedcouncil.org website: www.watershedcouncil.org

# FOR IMMEDIATE RELEASE

August 25, 2015

Contact: Jennifer McKay

(231) 347-1181

jenniferm@watershedcouncil.org

### Put Your Pills in the POD!

# Charlevoix County Drug Collection Event on September 12th

PETOSKEY – To help citizens properly dispose of unwanted or expired medicines, there is an upcoming POD (Prescription and Over-the-Counter Drug Drop-Off) collection event in Boyne City. This collection event will take place at the Boyne City Road Commission Garage, just east of Boyne City Public School football field, on Saturday, September 12, from 9 a.m. to 1:00 p.m.

This is an environmentally safe, convenient, and free way to dispose of unwanted and expired pills. Area residents can bring unused or expired prescriptions and over-the-counter medications in the original containers including pills, liquids, ointments, lotions, and even pet medications.

"Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan waters, community, and families," said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council. "By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, residents will help us keep our rivers and drinking water clean and our communities and families safe."

Traditional methods for disposing of unused medicines – flushing them down the toilet or throwing them in the trash – pose potential safety and health hazards and should be avoided. Medicines that languish in home cabinets are highly susceptible to misuse and abuse. Rates of prescription drug abuse in the U.S. are increasing, as are the number of accidental poisonings and overdoses due to these drugs. Studies show a majority of abused prescription drugs are obtained from family and friends, including from the home medicine cabinet.

Residents may also dispose of medicines throughout the year at permanent POD Drop-off Boxes, located at law enforcement agencies throughout Northern Michigan. For more information or to find a location near you, visit <a href="https://www.pillsinthepod.com">www.pillsinthepod.com</a>.

## ###

Tip of the Mitt Watershed Council: Tip of the Mitt Watershed Council speaks for our members including full-time and seasonal residents, lake associations, and businesses. We work to maintain the environmental integrity and economic and aesthetic values of lakes, streams, wetlands, and ground water in Northern Michigan, as well as statewide and throughout the Great Lakes Basin. As the lead organization for water resources protection in Antrim, Charlevoix, Cheboygan, and Emmet Counties, the Watershed Council is working to preserve the heritage of Northern Michigan – a tradition built around our magnificent waters.



Published on Interlochen Public Radio (http://ipr.interlochen.org)

# More Funding For Prescription Drug Drop Off

Date: 2013-09-30



Law enforcement oversees prescription drug drop-off. Photo courtesy of Tip of the Mitt Watershed Council

By Bob Allen

A Northern Michigan group will get more funding to properly dispose of unused prescription drugs. Tip of the Mitt Watershed Council has collected more than 6,000 pounds of pharmaceuticals over the last four years.

A national study finds traces of over the counter drugs in 85% of waterways tested. Federal environmental regulators now consider it an emerging concern.

The message used to be, flush them to get rid of them. "That's exactly the wrong message," says Gail Gruenwald, director of the Watershed Council. She points out that wastewater treatment systems aren't set up to strip out these chemicals.

"Things like antibiotics, antidepressants, DEET, interestingly, and some other things are ending up in our waterways," Gruenwald says.

The Michigan Department of Environmental Quality has just awarded Tip of the Mitt nearly 100,000 dollars to expand the program. Gruenwald says they'll try to get more participation from the elderly and young couples with children.

"Those are the two groups least likely to use these pod boxes or collection events and yet at the same time probably the most important to address," she says.

Tip of the Mitt offers drop boxes and free collection events in conjunction with area law enforcement in seven counties. The pills are taken downstate to an incinerator.

See More: MDEQ [4], prescription drugs [5], Tip of the Mitt Watershed Council [6], water pollution [7]

# Grant to fund drug disposal

Contributed

the Mitt Watershed Coun- POD Program also in- ters relied upon for drinkcil recently received a cludes 21 permanent colgrant in the amount of lection drop boxes at law \$99,795 from the Com- enforcement agencies is the fastest growing drug munity Pollution Preyen- throughout Northern tion Grant program. Michigan Department of Environmental Quality (MDEQ) to expand Northern Pharmaceutical and Over- care products for free. the Counter Drug Drop-Off (POD) Program.

The POD Program was initiated to address the growing concern of unused and expired pharmaceuticals polluting waterways, and putting public safety at risk, accordingto a council news re- pharmaceutical drugs. lease.

The Prescription and Over the Counter Drug Drop-Off Program or POD Program is a multicounty-wide medication Americans. drug take back initiative to provide a convenient location for residents to properly dispose of prescription and over-thecounter medications.

The POD Program includes community collec-

tion events in Emmet. Antrim, Chebovgan, and aquatic species, and im-PETOSKEY - Tip of Charlevoix Counties. The Michigan.

Residents may safely dispose of prescription, over-the-counter phar-Michigan's maceuticals, and personal This is the only program pain relievers, anti-anxiety in Northern Michigan that medications, stimulants. can take back controlled and sedatives nonmedsubstances.

> According to the Tip of month. the Mitt Watershed Council news release, throughies are being polluted with Trace amounts of pharmaceutical drugs have been detected in the drinking water sources of an estimated 41 million

A study by the United States Geological Survey found trace amounts of pharmaceuticals in 80 percent of streams and rivers that were tested. Pharmaceutical contaminants are a steady source

of chemical exposure for pact the quality of the waing and recreation.

Prescription drug abuse problem in the United States. The 2010 National Survey on Drug Use and Health estimates that 7 million persons aged twelve or older used prescription drugs including ically in the previous

This nonmedical prescription drug use is havout the nation, water bod- ing a devastating effect on communities through- ical Drop-Off Program. out the country.

According to the Centers for Disease Control and Prevention, poisoning deaths, which include drug overdoses from prescription drugs, are the leading cause of injury death in the United States: nearly nine out of ten poisoning deaths are caused by drugs.

The MDEQ Community Pollution Prevention grant will provide funding to enhance the program by conducting targeted education and outreach to reach key audiences and through development of a focused media campaign.

The result will be in- cil at (231) 347-1181.

creased awareness, access: and use of the POD Program by Northern Michigan community members. Through this project, the aim is to reduce the quantity of pharmaceuticals and personal care products entering Michigan's surface, ground, and drinking waters, as well as support law enforcement's efforts to keep the drugs out of the hands of people who sell and abuse them. and commit crimes while under their influence.

POD Organizations and Partners: Harbor Area Regional Board of Resources (HARBOR), Inc., Emmet County Household Chem-Little Traverse Bay Bands of Odawa Indians, Tip of the Mitt Watershed Council. McLaren Northern Michigan! Charlevoix County Recycling Program, Charlevoix County Conservation District. Northwest Michigan Community Health Agency, Charlevoix County, and numerous law enforcement agencies.

For more information about the Prescription and Over-the-Counter Drug Drop-off Program or how to properly dispose of medications visit www.watershedcouncil.org or call Tip of the Mitt Watershed Coun-



The Tip of the Mitt Watershed Council in Petoskey recently received a grant, to expand Northern Michigan's Pharmaceutical and Over the Counter Drug (POD) Drop-off Program. Policy Specialist, Jennifer McKay, demonstrates the convenience of using the POD collections boxes that are currently available at law enforcement agencles throughout Northern " Michigan to safely dispose of prescriptions, including controlled substances, over-the-counter pharmaceuticals, and personal care items for free \_contention:

# Tip of the Mitt launches medicine disposal, water quality survey

uTip of the Mitt Watershed Council, as part of . a grant project supported by the Michigan Department of Environmental · Quality Community Pol-, hition Prevention Grant Program, is launching a survey to gather information tion on pharmaceuticalliq medicine disposal behaviorôf Northern Michigan residents to help gauge the need for increased disposal options and community education.

The results will be tused to improve and expand the Prescription and Over-the-Counter Drug Drop-Off Program or POD Program, which. is a multicounty-wide medication drug-take back initiative to provide asconvenient and envifonmentally sound way for residents to properly dispose of medications. In the next week, surveys will be mailed out to random households.

"The survey is a valuable tool to help us gain a better understanding of current medicine disposal practices and the modisposal methods," said specialist at Tip of the Mitt Watershed Council. "Through this project, we will be able to reduce the quantity of pharmaceuticals and personal care products entering Michigan's surface, ground and drinking waters, as well as support law enforcement's efforts to keep these drugs out of the hands of people who will. sell them, abuse them and commit crimes while under their influence."

In addition, participants could win a prize

including a free pontoon rental for the day, a onehour watersports lesson, a \$100 BOYNE Gift Card, or one of two certificates for dinner for two at the Waas-no-dé Buffet.

If you do not receive a tivation behind different a survey in the mail, you can still help us out by fill-Jennifer McKay, policy 🛫 ing out a survey online at www.surveymonkey/s/ MichiganPOD or by filling out a survey at the following permanent POD. Box locations: Antrim County Sheriff, Charleyoix County Sheriff, Petoskey Department of Public Safety and Cheboygan County Sheriff.

For more information about the surveys or the POD Program, contact Jennifer McKay at Tip of the Mitt Watershed Council at (231) 347-1181 or jenniferm@watershedcouncil.org.

# Survey seeks details on prescription, over-counter drug disposal

### Contributed

PETOSKEY - Over the past few years, there has been a growing concern about the effects of medicines in local waters.

Improper disposal of unused or expired medicines can pose a significant danger to water resources, children, and community.

The Tip of the Mitt Watershed Council, as part of a grant project supported by the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program, is launching a survey to gather information on medicine disposal behavior of Northern Michigan res-

idents to help gauge the need for increased disposal options and community education.

The results will be used to improve and expand the Prescription and Over-the-Counter Drug Drop-Off Program or POD Program. The POD Program is a multi-county medication drug-take- back initiative to provide a convenient and environmentally sound way for residents to properly dispose of prescription and over-the-counter medications, according to a news release from the Tip of the Mitt Watershed Council.

In the next week, surveys will be mailed out to randomly selected households will be able to reduce the drawing for one of five Department of Public throughout

Northern Michigan, Residents should be on the lookout for the survey and are asked to respond if they receive one.

is increased awareness, access, and use of the POD Program by Northern Michigan community memhers." said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council.

"The survey is a valuable tool to help us gain a better understanding of current medicine disposal practices and the motivation behind different disposal methods. Through this project, we

quantity of pharmaceuticals and personal care products entering Michigan's surface, ground, and drinking waters, as well as support law enforcement's "The goal of the project efforts to keep these drugs out of the hands of people who will sell them, abuse them, and commit crimes while under their influence, stated Mckay in the news release.

> In addition to helping protect the health of Northern Michigan's citizens and environment, survey respondents could also win a prize.

> After completing the survey, persons also have a chance to enter into a

prizes.

Prizes include a free pontoon rental for the day; a one-hour watersports lesson courtesv of Tommy's Michigan and Walloon Village Marina: a \$100 Boyne gift card: or one of two certificates for dinner for two at the Waas-no-de' Buffet courtesy of Odawa Casino.

For those who do not receive a survey in the mail, a survey is available online at www.surveymonkey /s/MichiganPOD or a survev for is available at the following permanent POD Box locations: Antrim County Sheriff; Charlevoix County Sheriff: Petoskey

Safety and Chebovgan County Sheriff.

Those individuals who fill out a survey at a POD Box location will be entered into a drawing to win one of three \$50 Visa Gift Cards, generously donated by First Community Bank.

All residents who wantto help keep lakes and streams clean and the community safe are encouraged to fill out a survey.

For more information about the surveys or the POD Program, contact Jennifer Mckav at Tip of the Mitt Watershed Council at 231-347-1181 or ienniferm@watershedcouncil.org.





Department of Environmental Quality
PURE / (ICHIGAN







The MI Environmental Network News is brought to you courtesy of the Office of Environmental Assistance, Michigan Department of Environmental Quality.

# Informational Forum - MI Environmental Network

This forum represents an opportunity for our partners to make connections by asking questions, providing feedback, and offering possible solutions. Take advantage of this collaborative effort.

### Connections = solutions

Successful connections to date through this forum - 7

If you have information or comments regarding "Informational Forum", please send them to Jeff Spencer, Network Administrator, at <a href="mailto:spenceri3@michigan.gov">spenceri3@michigan.gov</a> (unless otherwise indicated).

# P2 Partners in the News

# **Mercury Collection Program for Michigan Businesses**

http://www.michigan.gov/documents/deg/deg-oea-flyer-mercurycollection 415542 7.pdf

# Michigan Green Communities 2014 Annual Conference

http://www.eventbrite.com/e/2014-michigan-green-communities-conference-tickets-10063202309

# Small Business Pollution Prevention Loan Program

http://www.michigan.gov/deq/0,1607,7-135-3307\_3515\_4144---,00.html For more information, contact Chad Rogers at 517-284-6872

# Clinic receives Environmental Loan to replace X-Ray System

http://www.ourmidland.com/news/clinic-receives-environmental-loan-to-replace-x-ray-system/article\_78ae8a1e-c96e-552e-8d7a-028d031622b4.html

# **Clean Corporate Citizen Member Listing**

http://www.michigan.gov/documents/deg/deg-ess-p2tas-c3-list 245896 7.pdf

# Environmental Awareness

### **Tourism Cares**

http://www.tourismcares.org/

# State Program Helps Firms Tap into Talents of Retired Engineers

http://mibiz.com/item/21210-state-program-helps-firms-tap-into-talents-of-retired-engineers

February 3, 2014

# Michigan Recycling Coalition conference

http://michiganrecycles.org/index.php/events/left-innerleft-center

# **National Shoreline Management Study**

http://www.nationalshorelinemanagement.us/

# **Sustainable Purchasing Leadership Council**

http://www.purchasingcouncil.org/

# The Green Chemistry Checklist

https://migreenchemistry.org/public/the-green-chemistry-checklist/

# Tip of the Mitt Launches Medicine Disposal, Water Quality Survey

http://www.petoskeynews.com/charlevoix/news/community/tip-of-the-mitt-launches-medicine-disposal-water-guality-survey/article e49ceefc-8a8c-11e3-8db9-0017a43b2370.html

# Belle Isle Advisory Panel: 'Hold us Accountable'

http://www.detroitnews.com/article/20140130/METRO01/301300085/1409/METRO/

# **Energy & Climate Change**

# Nearly \$50 Million to Advance High-Tech, Fuel Efficient American Autos

http://energy.gov/articles/secretary-moniz-announces-nearly-50-million-advance-high-tech-fuel-efficient-american-autos

# **Aggreko Powers Super Bowl**

http://www.energymanagertoday.com/aggreko-powers-super-bowl-098347/

# 2014 Model Year Rankings Released

http://www.greenercars.org/

# As Uses of Biochar Expand, Climate Benefits Still Uncertain

http://e360.yale.edu/feature/as uses of biochar expand\_climate\_benefits\_still\_uncertain/2730/

# Community and Resource Conservation

### The Grand Vision

http://www.thegrandvision.org/

# **Municipal Adaptation and Resiliency Service**

http://www.qlslcities.org/mars.cfm

# **Partnership for Sustainable Communities**

http://www.sustainablecommunities.gov/

# Wildlife Nation – Connecting Kids with Wildlife

http://wildlifenation.org/

1

# **Importance of Forest Stewardship**

https://ic.fsc.org/wood-and-fiber-science.182.htm

# Water Quality & Conservation

# White Lake to be First Area of Concern in Michigan Removed from List this Summer

www.mlive.com/news/muskegon/index.ssf/2014/01/officials white lake to be rem.html

# **Banking on Nature**

http://www.fws.gov/refuges/about/refugereports/

# **Marine Stewardship Council**

http://www.msc.org/

# A High-Tech Approach to Watershed Management

blog.epa.gov/science/2014/01/a-high-tech-approach-to-watershed-management/

# Training/Workshop/Conference Opportunities

# **Northwestern Michigan College Solar Training Opportunities**

https://www.nmc.edu/resources/extended-education/find-a-class/energy-construction/

# **Building Operations Certification (BOC) Training Incentives Available**

The Michigan Energy Office and participating utilities are offering significant incentives to attend upcoming <u>Building Operator Certification</u> (BOC) training. Past Rebuild Michigan participants (view a list <u>here</u>) are eligible for an incentive of up to \$350 from the Energy Office; they may also be eligible for an incentive of \$600 - \$950 from their utility (total tuition is \$1,450). More information can be found at boccentral.org.

Attendees should register for the class and send in the incentive application as soon as possible – this class location fills up quickly. For more information and to get an incentive application, check the <u>boccentral.org</u> webpage. Contact Karen Wieber at the Michigan Energy Office with any questions at 517-335-3756 or <u>wieberk7@michigan.qov</u>.

February 3, 2014

# Introduction to MAERS 2014 Workshop Series February 6 & 11, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308 3333 4169\_21606-290558--,00.html

# SARA Title III Tier Two 2014 Workshop Series February 4, 6 & 11, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308 3333-292960--,00.html

# 19th Annual Hazardous Waste Management Workshop February 12, 2014

http://wmawma.org/

# Michigan Green Communities 2014 Annual Conference - University of Michigan - Flint February 25-26, 2014

http://www.eventbrite.com/e/2014-michigan-green-communities-conference-tickets-10063202309

# 2014 Air Permit-to-Install Application Workshop Series March 18, May 20, September 3, November 6, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308 3333 4169 21606-248512--,00.html

# Michigan Inland Lakes Convention: Partnering to Protect Michigan's Inland Lakes May 1-3, 2014

http://michiganlakes.msue.msu.edu/convention

# **Green Infrastructure Conference**

May 8-9, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308 3333-312197--,00.html

# **2014 Main Streets Conference**

May 18-20, 2014

http://www.preservationnation.org/main-street/training/conference/2014-detroit/

# <u>Feedback</u>

If you have not done so, please take a few moments to complete this short evaluation, thanks. <a href="http://www.surveymonkey.com/s/FYZVR8Y">http://www.surveymonkey.com/s/FYZVR8Y</a>

February 3, 2014

SHERI MCWHIRTER-O'DONNELL/COURIER A POD drugs drop-off box is found in the lobby of the . Charlevolx County Jail in Charlevoix.

# Tipp of the Mitt to mail out POD program survey

# Environmental group seeks data about ongoing initiative

SHERI MCWHIRTER-O'DONNELL COURIER EDITOR

Local environmental advocates have grown more and more concerned during recent years about the impacts of medicines in our waters.

.. That's why officials from Petoskey based nonprofit environmental organization Tip of the Mitt Watershed Council have worked to create and promote a medication disposal program that will accept both prescription and overthe-counter drugs and keep the chemical conconctions out of our waters. It's called the Prescription and Overthe-Counter Drug Drop-Off Program, or POD program. and it is a multi-county drug take back initiative to provide a convenient and environmentally sound way for area resi-

dents to properly dispose of such medications.

The program is supported by grant funding through the Michigan Department of Environmental Quality's Community Pollution Prevention Grant Program.

Charlevoix residents can find a POD program disposal box in the lobby at Charlevoix County Jail on Grant Street. the building immediately adjacent to the sheriff's administration office.

Now, project proponents want to survey Northern Michigan residents and find out more about medicine disposal behavior to better gauge the need for increased disposal options and community education efforts. These surveys will be mailed in coming days to randomly selected households across the region.

"The goal of the project is increased awareness, access and use of the POD Program by Northern Michigan community members," said Jennifer McKay, policy specialist for Tip of the Mitt.

Information gleaned from the survey is expected to be a valuable tool to better understand how people rid themselves of their expired medicines and the motivations behind the methods, she said.

"Through this project, we will be able to reduce the quantity of pharmaceuticals and personal care products entering Michigan's surface, ground and drinking waters, as well as support law enforcement's efforts to keep these drugs out of the hands of people who will sell them, abuse them and commit crimes while under their

influence," McKay said.

Those who don't receive a survey in the mail, but still wish to participate, can, fill out a survey at www. surveymonkey/s/Michigan-POD online, or by filling out a survey found at the Charlevoix County Sheriff's Office, 1000 Grant St., Charlevoix. More information about the effort is available by calling (231) 347-1181 or sending email to jenniferm@ watershedcouncil.org online.

Tip of the Mitt's service area includes Antrim, Charlevoix, Cheboygan and Emmet counties, though the nonprofit agency also advocates for environmental integrity statewide and across the Great Lakes Basin, Visit www.watershedcouncil.org for more details about the group.

# Medicine disposal program seeks survey participation

Over the past few years, there has been a growing concern about the effects of medicines in our waters. Improper disposal of unused or expired medicines can pose a significant danger to our water resources, children, and community. So how do you dispose of medications you no longer need? This is what we want to know!

Tip of the Mitt Watershed Council, as part of a grant. project supported by the Michigan Department of Environmental Quality Com-" munity Pollution Prevention Grant Program, is launching a survey to gather information on medicine disposal behavior of Northern Michigan residents to help gauge the need for increased disposal options and community education. The results will be used to improve and expand the Prescription and Overthe-Counter Drug Drop-Off Program or POD Program. The POD Program is a multicounty-wide medication

# Medicine disposal program seeks survey participation

-CONTINUED from page 2B. drug-take back initiative to provide a convenient and environmentally sound way for residents to properly dispose of prescription and over-the-counter medications.

In the next week, surveys will be mailed out to randomly selected households throughout Northern Michigan. Please be on the lookout for the survey and if you receive it, help us protect our waters and community by taking just a few minutes to complete the survey.

"The goal of the project is increased awareness, access, and use of the POD Program by Northern Michigan community members," said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council. "The survey is a valuable tool to help us gain a better understanding of current medicine disposal practices and the motivation behind different disposal methods. Through this project, we will be able to reduce the quantity of pharmaceuticals and personal care

products entering Michigan's surface, ground, and drinking waters, as well as support law enforcement's efforts to keep these drugs out of the hands of people who will sell them, abuse them, and commit crimes while under their influence."

In addition to helping protect the health of Northern Michigan's citizens and environment, you could also win a prize! After completing the survey, you will also have a chance to enterinto a drawing for one of five amazing prizes. Prizes include a free pontoon rental for the day, a one hour watersports lesson courtesy of Tommy's Michigan and Walloon Village Marina, a \$100 BOYNE Gift Card, or one of two certificates for dinner for two at the Waas-no-de' Buffet courtesy of Odawa Casino.

If you do not receive a survey in the mail, you can still help us out by filling out a survey online at www. surveymonkey/s/Michigan-POD or by filling out a survey

at the following permanent POD Box locations: Antrim County Sheriff, Charlevoix County Sheriff, Petoskey Department of Public Safety, and Cheboygan County Sheriff. Those individuals who fill out a survey at a POD Box location will be entered into a drawing to win one of three \$50 Visa Gift Cards, generously donated by First Community Bank.

We encourage any resident who wants to help keep our lakes and streams clean and our community safe to fill out a survey.

Special thanks to the local businesses who generously donated the prizes: Tommy's Michigan, Walloon Village Marina, BOYNE, Odawa Casino, and First Community Bank.

For more information about the surveys or the POD Program, contact Jennifer McKay at Tip of the Mitt Watershed Council at 231-347-1181 or jenniferm@ watershedcouncil.org.

# PUR 4/11/14 Residents able to dispose unwanted and unused pharmaceuticals for free

### **ERICA RAKOWICZ**

(231) 439-9394 - erakowicz@schurz.com

In order to keep the water, community and residents safe, Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program offers free and proper disposal of unused and expired medi-

POD collection events reduce the risk of mishandled prescriptions which could potentially end up posing a danger for children and adults by improper use or contamination of water sources.

Residents should keep medicines in the original container in addition to erasing or covering up any and all personal information.

These free collection events provide opportunity to dispose a variety of medicines, including: pills, liquids, ointments, lotions, pet medications and prescriptions that are considered controlled substances.

The local institutions involved with the organization and payment of POD collection events in the area are McLaren Northern Michigan, Emmet County Household Chemical Drop-off Program, Little Traverse Bay Bands of Odawa Indians, Harbor Area Regional Board of Resources (HARBOR), Inc., Tip of the Mitt Watershed Council, Health Department of Northwest Michigan, Charlevoix County Conservation District, Charlevoix County Road Commission, Petoskey Department of Public Safety, Cheboygan County Sheriff, Antrim County Sheriff and Boyne City Police Department.

In addition to the events listed below, residents can also dispose of pharmaceuticals at permanently stationed POD drop boxes throughout the area. For the location of these stations, visit www.PillsInThePOD.com.

**POD Collection Events are** scheduled for:

-- 7 a.m.-4 p.m. on Tuesday, April 22, at McLaren Northern Michigan, Petoskey Campus (Hospital Circle Driveway - Entrance off Mitchell Street across from Johan's Bakery)

- 10 a.m.-2 p.m. on Thursday. April 24, at McLaren Northern Michigan, Cheboygan Campus (Entrance North of the Emergency Department)

- 10 a.m.-2 p.m. on Saturday,

April 26, in front of Antrim County Courthouse (E. Cayuga Street, Bellaire)

9 a.m.-noon on Saturday, July 26, at Emmet County Drop-Off Center (7363 Pleasantview Road, Harbor Springs)

– 9 a.m.-2 p.m. on Saturday, Sept. 6, at the Boyne City Road Commission Garage (Just east of the Boyne City Public School

football field)

- 7 a.m.-4 p.m. on Wednesday, Oct. 15, at McLaren Northern Michigan, Petoskey Campus (Hospital Circle Driveway - Entrance off Mitchell Street across from Johan's Bakery)

For more information, contact Jennifer McKay at Tip of the Mitt Watershed Council at jenniferm@watershedcouncil. org or (231) 347-1181.

# Drug Drop-Off Days scheduled for 2014

Prescription and Over-the-Counter Drug Drop-Off Days (POD) will be held throughout 2014 as an opportunity for residents to safely dispose of their unwanted and unused pharmaceuticals for free.

POD Collection Events are scheduled for:

- Tuesday, April 22 from 7am - 4pm; McLaren Northern Michigan, Petoskey Campus (Hospital Circle Driveway -Entrance off Mitchell Street across from Johan's Bakery)
- Thursday, April 24 from 10am-2pm; McLaren Northern Michigan, Cheboygan Campus (Entrance North of the Emergency Department)
- Saturday, April 26 from 10am - 2pm; In front of Antrim County Courthouse (E. Cayuga Street, Bellaire)
- Saturday, July 26 from 9am -12pm; Emmet County Drop-Off Center (7363 Pleasantview Road, Harbor Springs)
- Saturday, September 6 from 9am -2pm; Boyne City Road Commission Garage (Just east of the Boyne City Public School football field)
- Wednesday, October 15 from 7am - 4pm; McLaren Northern Michigan, Petoskey Cam-

pus (Hospital Circle Driveway - Entrance off Mitchell Street across from Johan's Bakery)

Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan's waters, community, and families. Put Your Pills in the POD! The best solution is to dispose of old and expired medications through Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program.

Properly disposing of unused medicines at POD collection events reduces the risk that prescriptions will be mishandled and end up on the street, prevents avoidable poisoning of both children and adults, and prevents contamination of water resources.

Residents are encouraged to bring prescription medicines and over-the-counter pharmaceuticals to any of the POD collection events. We request that residents keep the medicines in the original container for easy identification of the medicine but erase or black out all personal information from the prescription bottles. The POD events are unique in the area in that they accept all prescription drugs, including those classified as controlled substances. Pills, liquids, ointments, lotions, and even pet medications are all accepted at the events.

The service is being organized and paid for by a group of leading local institutions united in their concern about the public health, public safety, and environmental effects of holding on to, flushing, or landfilling unwanted drugs. Group members include McLaren Northern Michigan, **Emmet County Household** Chemical Drop-off Program, Little Traverse Bay Bands of Odawa Indians, Harbor Area Regional Board of Resources (HARBOR), Inc., Tip of the Mitt Watershed Council, Health Department of Northwest Michigan, Charlevoix County Conservation District, Charlevoix County Road Commission, Petoskey Department of Public Safety, Cheboygan County Sheriff, Antrim County Sheriff, and Boyne City Police Department.

In addition to collection events, residents may also

dispose of pharmaceuticals at permanent POD Drop Boxes located at law enforcement agencies throughout Northern Michigan. For the locations of the POD Boxes, visit www.PillsInThePOD.com.

For more information contact Jennifer McKay at Tip of the Mitt Watershed Council atjenniferm@watershedcouncil.org or 231-347-1181.

# Collection days scheduled for prescription medicines

Prescription and Over-the-Counter Drug Drop-Off Days will be held throughout 2014 as an opportunity for residents to safely dispose of their unwanted and unused pharmaceuticals for free.

Collection Events are scheduled for: Tuesday, April 22 from 7 a.m. – 4 p.m.

McLaren Northern Michigan, Petoskey Campus (Hospital Circle Driveway -Entrance off Mitchell Street across from Johan's Bakery)

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Properly disposing of unused medicines

reduces the risk that prescriptions will end up on the street, prevents avoidable poisoning of both children and adults, and prevents contamination of water resources. Residents are encouraged to bring prescription medicines and overthe-counter pharmaceuticals to any of the collection events. Keep medicines in the original container for easy identification, but erase or black out all personal information from the prescription bottles.

Permanent Drop Boxes are also located at law enforcement agencies throughout Northern Michigan. For the locations of the POD Boxes, visit www.PillsInThePOD. com.

# Drug Drop-Off Day planned in northern Michigan

Saturday, April 26, 2014 4:01 am | Updated: 7:10 am, Sat Apr 26, 2014.

Drug Drop-Off Day planned in northern Michigan Associated Press

PETOSKEY, Mich. (AP) — Residents of Michigan's northern Lower Peninsula have opportunities this year to get rid of unused medicines in a safe way.

The Tip of the Mitt Watershed Council in Petoskey is among groups sponsoring Prescription and Over-the-Counter Drug Drop-off Days. The next drop-off event will be Saturday in front of the Antrim County Courthouse in Bellaire.

The program is meant to prevent improper disposal of pharmaceuticals. Scientists say pouring or flushing them into sewage systems can pollute waterways. There's also a danger of unwanted drugs winding up on the streets or poisoning children and adults.

People bringing drugs to the drop-off sites are asked to keep them in their original containers with personal information blacked out. Prescription and non-prescription medicines are accepted, including pills, liquids, ointments, lotions and even pet medications.

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Picked up by the following media outlets:

- Washington Times
- Alpena News
- Midland Daily News
- Ludington Daily News
- 9 and 10 News
- 13 ABC
- WLNS TV 6





Department of Environmental Quality
PURE (ICHIGAN







The MI Environmental Network News is brought to you courtesy of the Office of Environmental Assistance, Michigan Department of Environmental Quality.

# Informational Forum - MI Environmental Network

This is <u>your opportunity</u> to make a connection by asking a question, providing feedback, and offering possible solutions. Take advantage of this collaborative effort now, by contacting Jeff Spencer, Network Facilitator, at <u>spencerj3@michigan.gov</u> (unless otherwise indicated).

## Connections = solutions

Successful connections to date through this forum - 13

# Small Business Pollution Prevention Loan <a href="http://www.michigan.qov/p2loan">http://www.michigan.qov/p2loan</a>

Cost reduction, risk avoidance and enhanced competitive advantage are goals of many small businesses in Michigan. The Department of Environmental Quality wants to help you achieve these goals through the Small Business Pollution Prevention Loan Program. If you are a small business with less than 500 employees and you are interested in eliminating or reducing on-site waste, conducting environmentally sound reuse or recycling of your generated wastes, or conserving energy or water then you should visit the Small Business P2 Loan Program website.

Program Contact - <u>Chad Rogers</u> 517-284-6872

# **RETAP – Retired Engineer Technical Assistance** http://www.michiqan.gov/retap

Retired professionals are available through the Retired Engineer Technical Assistance Program (RETAP) to assist businesses and institutions in Michigan with pollution prevention (P2) and energy efficiency. Businesses of 500 employees or fewer in the state and institutions of any size are eligible. RETAP services are free of charge. There is no obligation to implement RETAP recommendations. However, significant cost savings can be achieved from employing P2 and energy efficiency techniques. Follow-up with companies assisted through RETAP has shown annual cost savings averaging over \$40,000 per facility.

Program Contact - <u>David Herb</u> 517-284-6863

# Pollution Prevention News

# Free Mercury Collection Program for Michigan Businesses

http://www.michigan.gov/documents/deg/deg-oea-flyer-mercurycollection 415542 7.pdf

### Clean Corporate Citizen Member Listing

http://www.michigan.gov/documents/deg/deg-ess-p2tas-c3-list 245896 7.pdf

# Hope College – Michigan Turfgrass Environmental Stewardship Program http://www.hope.edu/node/11617

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May 5, 2014

# Nominations Open for the 2014 Michigan Green Chemistry Governor's Awards

http://www.michigan.gov/deq/0,1607,7-135-3585 49005---,00.html

# **Environmental Awareness**

# Michigan Cities Graded on Air Pollution

http://michiganradio.org/post/michigan-cities-graded-air-pollution

# Officials Seek Assurances from Enbridge on Pipeline

http://www.freep.com/article/20140430/BUSINESS06/304300112/enbridge-pipelines-safety

### **New Fracking Rules Mean Residents will Get More Information**

http://www.freep.com/article/20140429/NEWS05/304290038/

## 7 Eco Apps That Are Actually Worth Downloading

http://www.triplepundit.com/2014/04/3p-weekend-10-eco-apps-actually-worth-downloading/

### In a Troubled African Park, a Battle over Oil Exploration

http://e360.yale.edu/feature/in troubled african virunga national park a battle over oil exploration/2761/

### **Responsible Purchasing Network**

http://www.responsiblepurchasing.org/

### University of Michigan's Center for Sustainable Systems Factsheets

http://css.snre.umich.edu/factsheets

### SAE Improving the Value Proposition: Greener Products and Processes Tech-Fast

https://www.sae-detroit.org/event-details/?id=166

# Energy, Technology & Climate Change

### Lansing Board of Water & Light Achieves Gold Standard For LEED Certification

https://www.lbwl.com/About-the-BWL/News/BWL-Achieves-Gold-Standard-For-LEED-Certification/

# Experience a LEED Gold Certified Hotel - City Flats Hotel Holland

https://www.cityflatshotel.com/holland/features/leed/

### America's Coming Manufacturing Revolution - Fracking, robotics, and nanotechnology

http://www.theatlantic.com/business/archive/2014/04/americas-coming-manufacturing-revolution/360931/

### **EPA's Home Energy Yardstick**

https://www.energystar.gov/index.cfm?fuseaction=HOME ENERGY YARDSTICK.showGetStarted

### Why Wave Power Has Lagged Far Behind as Energy Source

http://e360.yale.edu/feature/why wave power has lagged far behind as energy source/2760/

Small Business Innovation Research: Bringing Clean Energy Technologies to the Marketplace

http://energy.gov/eere/articles/small-business-innovation-research-bringing-clean-energy-technologies-marketplace

# Community and Resource Conservation

**Ingham County Pollution Prevention Program** 

http://hd.ingham.org/Home/EnvironmentalHealth/WasteManagement/P2Regulation.aspx

Michigan's Residential Recycling Plan

https://www.michigan.gov/documents/deg/DEQ-OWMRP-SWS-Proposed\_Recycling\_Action\_Plan\_448494\_7.pdf

EPA, Schools and Communities Work Together to Reduce Asthma

http://blog.epa.gov/blog/2014/05/epa-schools-and-communities-work-together-to-reduce-asthma/

Pills in the Pod - Prescription and Over-the-Counter Drug Drop-Off Program

http://www.pillsinthepod.com/

Coal Tar Sealants - May 22 Webinar for Great Lakes Community Officials and Staff

http://us1.campaign-archive1.com/?u=4fffd9d471902bb9dcdc4745f&id=1be7ef2010

**Interstate Mercury Education & Reduction Clearinghouse (IMERC)** 

http://www.newmoa.org/prevention/mercury/imerc/IMERCFactSheet.pdf

Thunder Bay 2014 Navigating Change - Fresh Air. Fresh Water. Fresh Ideas

http://www.thunderbay2014.com/

# Water Quality & Conservation

Legislators Target Microbeads - Plastic Particles Affecting Health of Fish, Humans, Scientists Say

http://journaltimes.com/news/local/339c8360-d1ef-11e3-9035-001a4bcf887a.html

Green Infrastructure for Stormwater Management in New Hampshire Coastal Communities

http://southeastwatershedalliance.org/green-infrastructure/

**Great Lakes Shoreline Cities Green Infrastructure Grants** 

http://www.epa.gov/grtlakes/fund/shoreline/index.html

What is EPA Doing to Support Green Infrastructure?

http://water.epa.gov/infrastructure/greeninfrastructure/gi\_support.cfm

**Green Infrastructure and Water Quality** 

http://www.michigan.gov/deg/0,4561,7-135-3313-287910--,00.html

**National Drinking Water Week 2014** 

http://www.awwa.org/resources-tools/public-affairs/public-affairs-events/drinking-water-week/dww-materials.aspx

May 5, 2014

# **Mott Foundation - Conservation of Freshwater Ecosystems**

http://www.mott.org/FundingInterests/programs/environment/ecosystems

# Training/Workshop/Conference Opportunities

# 2014 Air Permit-to-Install Application Workshop Series

May 20, September 3, November 6, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308 3333 4169 21606-248512--,00.html

### **Green Infrastructure Conference**

May 8-9, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308\_3333-312197--,00.html

# Michigan Clean Marina Workshop

May 15, 2014

http://us2.campaign-archive1.com/?u=04ef286fa5889f0017965cf25&id=6a96893cc9&e=d4341f37fd

### 2014 Main Streets Conference

May 18-20, 2014

http://www.preservationnation.org/main-street/training/conference/2014-detroit/

# **U.P.** Green Expo

May 22, 2014

http://www.upgreenrecycling.com/U-P--Green-Expo.html

## 2014 Michigan Environmental Compliance Conference

May 29, 2014 (Traverse City) \* June 5, 2014 (Grand Rapids) \* June 10, 2014 (Livonia)

http://www.michigan.gov/deg/0,4561,7-135-3308 3333 4169 21606-319661--,00.html

# Advanced Liquid and Hazardous Waste Characterization Workshop

June 24, 2014 (Kalamazoo) \* June 26, 2014 (Troy)

http://www.michigan.gov/deg/0,4561,7-135-3308\_3333\_4169\_21606-323656--,00.html

# Adaptation in the Great Lakes Region Conference

June 24-26, 2014

http://graham.umich.edu/glaac

# Michigan Energy Fair

June 27-28, 2014

http://www.glrea.org/

# SAVE THE DATE - Sustainable Manufacturing: Leading the Way to Prevention, Profit and the Future September 17, 2014

http://www.michigan.gov/deg/0,4561,7-135-3308 3333 4169 21606-324263--,00.html

The Ticker: Traverse City News and Events

# Drug Drop-Off Box A Success



Launched in January, 2013, Grand
Traverse County's Prescription and
Over-the-Counter Drug Drop-Off Box
collected 1,600 pounds of medications
during its first year of operation,
according to Sheriff Tom Bensley. And
through mid-May this year, another
400 pounds of unwanted and unused
household medications have been
turned in, Bensley told GT county
commissioners last week. The box is
located in the lobby of the Law
Enforcement Center at 851 Woodmere
in Traverse City.

"The box is emptied daily, weighed and the contents stored," explained Bensley. "When we get too much, it's transported to Grand Rapids where it is incinerated. It's been a very successful program."

The public can drop off unwanted medications any time throughout the year. Items accepted include prescription and over-the-counter medications, controlled substances, pet medicines, nutritional supplements, vitamins, medicated ointments and lotions, and liquid medications in sealed containers. Items not accepted include needles or other sharps, aerosol cans, bloody or infectious waste, thermometers, IV bags, trash or mail. Needles and other sharps are accepted at Integrity Home Health Care, 2062 U.S. 31 South, across from Cracker Barrel.

http://www.traverseticker.com/story/drug-drop-off-box-a-success

# NCMC students produce animated ad for prescription drop off program

Students in North Central Michigan College's "Special Topic in Animation" class produced a 30-second animated commercial for the Northern Michigan Prescription and Over-the-Counter Drug Drop-Off (POD) Program. The commercial began airing this month July on local broadcast television stations.

The commercial is part of a new "Put Your Pills in the POD!" media and education campaign led by Tip of the Mitt Watershed Council to raise awareness about the POD Program.

The POD Program is a multicounty pharmaceutical take-back initiative to provide a convenient and environmentally sound way for residents to properly dispose of unwanted and unused medications.Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan.

Class instructor, Anne Morningstar, said "This project came at a perfect time for the students. The level of responsibility that is expected when working with a client can be very intimidating. Each and every one of these students stepped up and showed that they are prepared to create professional-level work for real world clients."

Kristy Beyer, Director of Communications at Tip of the Mitt Watershed Council, was extremely pleased with the outcome. "The students were able to learn about the POD program and then use their artistic talents to convey the program's importance to the community through animation," said Beyer. "It was a wonderful partnership and we hope to do it again with future classes."

The commercial focuses on the harm that flushing your unwanted and unused pills down the toilet or sink can have to the health of our surface and drinking waters.

Over 80% of waterways tested in the United States show traces of common medications, such as acetaminophen, hormones, blood pressure medicine, codeine, and antibiotics. Additionally, an investigation by the Associated Press found that drugs are also in the drinking water supplies of 41 million Americans.

Although these contaminants are found at very low

levels, we do not know their long-term effects on animal populations that were never intended to ingest those compounds. Many animals get a daily dose of medications at their local watering hole. Even worse, fish and other aquatic animals are constantly exposed to the pharmaceutical mixture. Some of these chemicals interfere with or mimic natural hormones and disrupt reproduction, development, and behavior of fish and other organisms.

The commercial is part of a grant project supported by the Michigan Department of Environmental Quality Community Pollution Prevention Grant Program and can be viewed online atwww.PillsIn-ThePod.com.

# ollaboration

The following guest commentary was written by Jennifer McKay, policy specialist with the Tip of the Mitt Watershed Council.

he Tip of the Mitt Watershed Council's mission is to protect our lakes, streams, wetlands and groundwater through respected advocacy, innovative education, technically sound water quality monitoring, thorough re-



McKay

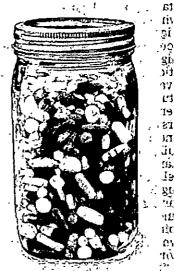
search, and restoration actions. We achieve our mission by empowering others and we believe in the capacity to make a positive difference. One program in particular exem-

plifies this: the Prescription and Over-the-Counter Drug Drop-Off Program, or POD. Program.

The POD Program is a multicounty-wide medication drug-take back initiative that provides a convenient and environmentally sound way for Northern Michigan residents to properly dispose of medi-

preations. Currently, the POD seasy was Program includes community collection events in Antrim, Charlevoix, Cheboygan and Emmet counties. The POD Program also includes more than 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter pharma-. ceuticals, and personal care products for free. Through the POD Program and properly disposing of unwanted pharmaceuticals and drugs, we are keeping our rivers and drinking water clean and our communities and families safe.

This program is a perfect example of how empowering others can make a positive difference and ensure clean water for future generations. Working together with a group of leading local institutions united in their concern



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More than 13,000 pounds \*\*\* of unused and unwanted medicines and personal care products have been collected and disposed of properly since the 🥦 inception of the Prescription ( i) and Over-the-Counter Drug Drop-Off Program, or POD Program in 2008.

"I mink people blee die properly dispose of unwanted lo and unused medications. The community can and is making a positive difference for the health of our waters  $\stackrel{\checkmark}{-}$  a very significant difference: In 2014, residents disposed of over 4,500 pounds of unwanted . and expired medicines and personal care products. That is more than 2 tons, or the weight of a typical hippopotamus or rhinoceros. This is an increase of over 1,000 pounds disposed of in 2013.

Through community collection events and permanent drop boxes at local law enforcement offices, over 13,000 pounds of unused and unwanted medicines and personal care products have been collected and disposed of properly since the inception of the program in 2008. This includes over 250 pounds of f controlled substances, which

· 建筑 11、经验的 2000年11 2000年 110 74. s ()]} 7174 [1183 Prescription and Over-thelage Counter (POD) Drop-off. MECO-\$ ..... Residents can adely dispose 71772 अधिकां प्रकार वे उत्पर्ध राज्य lease 1727 pharasonicals for free arone grann of the POD orbeition back. hlun-They are located at the Harber 55+1. Springs Police Department and SHIMMO bmA COLLEY the Ummer County Shortf's Ofcost, tice on M-138, how more FOO s. Call locations and other intering-347tion visit Pllist the COND to the ATALL OF S. C. (31 Volunteer Opportunities veling, of all The Northwest Michigan o. Free Community Section Secrets. The Thi is made Wille As In Boundary in socking 11000 Kallen eres to const. The co Property Continues on Albertas

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# Sheriff Department has prescription drug drop box

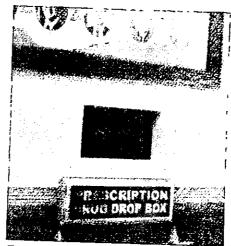
Cheboygan County Sheriff Dale Clarmont initiated a prescription drug drop box in 2009 due to the growing problem of drug abuse with prescription drugs.

"Eighty percent of those in our jail are there because of drug related crimes. The more we can do to get prescription drugs off the street the better, which is why we added the drop off box in our lobby," Clarmont said.

The drug drop box is a no questions asked operation. Simply come in to the Cheboygan County Sheriff Department Lobby and place your extra and outdated prescription drugs in the box. The drugs are then disposed of.

"This allows parents and grandparents to have a proper way to dispose of their prescriptions so they don't get into the wrong hands. We have learned in many cases that pills have been easily accessible in the medicine cabinets therefore we encourage those who have prescription drugs, especially opiate based, to store them in a safe or somewhere where they are not easily accessible or visible" Clarmont said.

Because many of these drugs can become an environmental hazard, the Sheriff encourages the public to drop off their drugs and not throw them away or flush them. Twice a year the drugs are collected from participating



The Cheboygan County Sheriff's Department has a drug drop box where people can drop off unused prescription drugs. The drugs are then taken to an incinerator.

units by Northern Michigan law enforcement agencies who take turns transporting the collected drugs to the Kent County incinerator for proper disposal.

"Over the years we have averaged between 500 and 800 pounds of prescriptions drugs per year and this year we were at 566 pounds that was properly disposed of. That is a lot of pills that don't reach our streets or duniped into our environment."

# Attempt world record planking

continued from front

the time was Pat McGinnis, who was videoing the attempt to verify it as a

TONYA'S
HAIR
DESIGN

world record.

Rather than watching a clock. Bushinski listened to music on her headphones and focused on other things. "I was thinking about the sun, the beach. I got lost in my music. I made a play list of music. I knew what my last song would be,"

Bushinski said that as with many forms of exercise, making sure to breathe properly is critical.

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# Prescription med. drop-off July 25

To help citizens properly dispose of unwanted or expired medicines, there is an upcoming POD (Prescription and Over-the-Counter Drug Drop-Off) collection event in Harbor Springs. This collection event will take place at the Emmet County Drop-Off Center, 7363 Pleasantview Road, on Saturday, July 25, from 9 a.m. to noon.

This is an environmentally safe, convenient, and free way to dispose of unwanted and expired pills. Area residents can bring unused or expired prescriptions and over-the-counter medications in the original containers including pills, liquids, ointments, lotions, and even pet medications.

"Improper disposal of unwanted and expired medicine can pose a significant danger to our Northern Michigan waters, community, and families," said Jennifer McKay, policy specialist, Tip of the Mitt Watershed Council. "By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, residents will help us keep our rivers and drinking water clean and our communities and families safe.

Residents may also dispose of medicines throughout the year at permanent POD Drop-off Boxes, located at law enforcement agencies throughout Northern Michigan. For more information or to find a location near you, visit www.pillsinthepod.com.

# From prescription drugs to pipelines — watershed council's 2015 accomplishments

The following is a guest commentary written by Gail Gruenwald, the executive director for Tip of the Mitt Watershed Council.

s 2015 comes to a close, all of us here at the Tip of the Mitt Watershed Council are reflecting on a successful year protecting Northern Michigan's waters. Each year the Tip of the Mitt Watershed Council addresses a myriad of issues that impact Northern Michigan's waters. Our programs are as diverse as the lakes and streams we work to protect. In 2015, we implemented extensive water quality monitoring programs, numerous research projects. addressed dozens of local, statewide, and federal policy issues, and reached out to thousands of Northern Michigan residents with our message of water quality protection.

As soon as the ice was off the lakes and streams in the spring of 2015, our staff and volunteers were on the water assessing their status and health. On the lakes we measure the chemical water world and on the streams we assess the ecological health through the aquatic insects that live there. We look for long-term changes and trends, rarely finding drastic changes from year to year. We and others utilize this important data to correct impacts. and put in place protective

program that engages students in watershed protection efforts. Eighty six students in five schools participated. They analyzed stream water quality data and shared their projects at a Summit held at North Central Michigan College. We will be expanding the program this spring to include another five schools.

The Prescription and Over the Counter Drug program (POD) continues to be hugely successful. We work in partnership to collect and properly dispose of unwanted prescription and over-thecounter drugs. In 2015, we disposed of over 7,000 pounds of unwanted and expired medicines and personal care products. Over 20,000 pounds have been collected and disposed of properly since the program's inception in 2008. Our public service announcements continued to run on local television stations encouraging the proper disposal in one of the 20 permanent collection drop boxes at law enforcement agencies.

Pipelines, fracking, microbeads, wetland regulations, Great Lakes water diversion, and many more issues were addressed by the Watershed Council policy team this past year. We hosted a pipeline workshop to help the community learn more about oil and gas pipelines in general and in particular Line 5 which traverses our

there. We look for long-term changes and trends, rarely finding drastic changes from year to year. We and others utilize this important data to correct impacts and put in place protective measures.

In addition to the annual monitoring we perform we also complete research and inventories specific to a particular area. In 2015, we completed an ambitious list of projects throughout our four-county service area ranging from assessing aquatic invasive plants in several lakes, analyzing land parcels for protection, assessing stormwater impacts in various communities, and surveying road-stream crossings. Our surveys include reports with recommendations that can be followed to restore and improve water quality.

The Watershed Council also completed several restoration projects in 2015. We put the final touches on our Tannery Creek restoration project along Little Traverse Bay and we installed four community rain gardens in Bay View to address stormwater and pollutant runoff. We hosted a rain garden workshop at a private residence on Little Traverse Bay with a dozen volunteers completing the installation. And once again, we hosted our annual Healing the Bear clean-up to continue our decade long effort to restore the Bear River.

The Watershed Council launched the Watershed Academy for high school biology students throughout Emmet and Charlevoix Counties. The Watershed Academy is a place-based environmental education

tershed Council policy team this past year. We hosted a pipeline workshop to help the community learn more about oil and gas pipelines in general and in particular Line 5 which traverses our Northern Michigan landscape. We also participated in a pipeline spill exercise to work toward improved preparedness. We worked closely with the regulatory agencies in an effort to improve the way Michigan regulates hydrologic fracturing practices. We urged the State of Michigan and United States Environmen- of tal Protection Agency to continue to lead the nation selby protecting Michigan's critical wetlands. And we addressed emerging issues such as the pollution from plastic microbeads in our Great Lakes and the toxins found in pavement sealcoat v! materials.

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Throughout the year we of reached out to residents 32 and visitors alike with our day message. All with the goal on of encouraging personal 70 stewardship of our pre-28 clous waters. We updated our office front room with informative displays on Þ¢ a variety of water quality m topics. We participated in the first Waganakising Bay oo Day on Little Traverse Bay 57 and hosted numerous work-rd shops, meetings, and oppor-1V tunities for residents and others to learn more about рc their role in protecting our is waters. Our efforts this past year and throughout the th past 36 years has focused ĸΘ on what each of us can do кì to protect our waters now ſΩ and for future generations. Çi We will continue to work m: tirelessly toward this end in of 2016 and beyond. Join us.



Check your medicine cabinet frequently for unwanted or expired medications and dispose of them properly. For a POD box or collection event near you, visit www.PillsInThePOD.com.

# **Pharmaceuticals in Our Waters**

Written by Jennifer McKay, Policy Specialist for Tip of the Mitt Watershed Council

Medicines are produced and prescribed in increasing volumes every year. Thousands of tons of pharmaceuticals are used across the globe, and Americans alone fill more than three billion prescriptions a year. Considering that four out of five people leave a doctor's office with a prescription, one can imagine how much of that medication potentially is being thrown away improperly; especially when twenty to sixty percent of prescription medications go unused and are eventually disposed.

With more than 30 million people living around the Great Lakes, an untold number of them flush unused and expired medications down the toilet every day. These medicines end up at sewage treatment plants or in septic systems that are not designed to remove them. We have more than 1,400 wastewater treatment plants in the U.S. and Canada that discharge 4.8 billion gallons of treated effluent into the Great Lakes basin every day. Only about half of the prescription drugs and other newly emerging contaminants in sewage are removed by treatment plants—the rest end up in our waters.

What exactly does that mean for you and me? It means we have widespread contamination of our waterways by pharmaceuticals. Over 80% of waterways tested in the United States show traces of common medications such as acetaminophen, hormones, blood pressure medicine, codeine, and antibiotics, according to a study by the U.S. Geological Survey. Next, we learned from a 2008 investigation by the Associated Press that there were drugs in the drinking water supplies of 41 million Americans.

Although these emerging contaminants are being found at very low levels – in parts per trillion – we don't know their long-term effects. Science knows what the benefits of these drugs are to those who need them, but we don't know the long-term effects to populations that were never intended to ingest those compounds over long periods of time. Many animals get a daily dose of drugs at their local watering hole and, even

in a pharmaceutical brew. Some of these chemicals interfere with or mimic natural hormones and disrupt reproduction, development, and behavior of fish and other organisms.

With trace amounts of all those pharmaceuticals showing up in the planet's largest source of fresh surface and drinking water, it is time we dispose of medicines in a different way.

Pouring them down the drain is basically the same as flushing them away. No good. Throwing them in the trash isn't good either. Children or pets might get to them accidentally or adults with drug abuse problems could get to them on purpose. Not to mention that throwing medicine in the trash only delays the pharmaceutical chemicals from reaching groundwater or rivers and lakes. Leachate from landfills is collected and piped or trucked to wastewater treatment plants before it is discharged into nearby rivers and lakes. So regardless of the pathway - effluent from treatment plants. septic systems, and runoff and groundwater from uncontrolled landfills - medicines are still entering out waterways.

So, what should you do with unwanted and unused medications? The best solution is to dispose of old and expired medications through Northern Michigan's Prescription and Over-the-Counter Drug Drop-off (POD) Program.

The POD Program is a multicounty-wide medication drug take-back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter pharmaceuticals, and personal care products for free and the POD Program is the only



Using a POD Box for disposing unwanted or expired medications keeps our lakes, rivers, and drinking water clean and our communities and families safe.

program in Northern Michigan that can accept and dispose of controlled substances. For a list of drop-off locations and other information about the program, visit www. PillsInThePOD.com.

By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, you will help us keep our waters clean and our communities and families safe.

Tip of the Mitt Watershed Council: Tip of the Mitt Watershed Council speaks for our members including full-time and seasonal residents, lake associations, and businesses. We work to maintain the environmental integrity and economic and aesthetic values of lakes, streams, wetlands, and ground water in Northern Michigan, as well as statewide and throughout the Great Lakes Basin. As the lead organization for water resources protection in Antrim, Charlevoix, Cheboygan, and Emmet Counties, the Watershed Council is working to preserve the heritage of Northern Michigan – a tradition built around our magnificent waters. For more information about the Watershed Council, visit www.watershedcouncil.org.



POD Program Coordinator, Jennifer McKay (far right) works with local law enforcement and staff from McLaren Northern Michigan hospital

# TIP OF THE MITT WATERSHED COUNCIL Keep our Drinking Water CLEAN



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By using the POD Program and properly disposing of unwanted pharmaceuticals and drugs, you will help us keep our rivers and drinking water clean and our communities and families safe.



Docklines 2014

# How to Properly Dispose of Medications

http://www.watershedcouncil.org/learn/pharmacueticals-in-our-waters/

Use the Prescription & Over-the-Counter Drug Drop-Off Box (POD Box)—these drop-off boxes provide a secure, convenient, and environmentally sound option for the disposal of unused and unwanted household medications.

Residents can drop off unused or unwanted medications at any time throughout the year. All medications are handled according to the law enforcement agency's evidence protocols until taken for final destruction in accordance with state and federal laws. To learn more about the POD Drop-off Program, visit <a href="https://www.pillsinthepod.com">www.pillsinthepod.com</a>. Below are the POD Drop Box Locations in Antrim and Grand Traverse Counties:

# **Antrim County**

- Antrim County Sheriff's Office Administration Office107 Grove Street, Bellaire, MI 49615 (231) 533-8627
- Elk Rapids Police Dept. 3321 Bridge St, Elk Rapids, MI 49629 (231)-264-6592

### GRAND TRAVERSE COUNTY

 Grand Traverse County Sheriff/Traverse City Police Department Law Enforcement Center, 851 Woodmere Avenue, Traverse City, MI 49686 (231) 995-5001

### ITEMS ACCEPTED:

- Prescription Drugs (Including controlled substances)
- Over-the-counter (OTC) Medicines
- Pet Medicines
- Nutritional Supplements and Vitamins
- Medicated Ointments and Lotions
- Liquid Medications in Sealed Containers or Plastic Bags

### ITEMS NOT ACCEPTED:

- Needles, Lancets, or Pen Needles (ANY Sharps)
- Aerosol Cans
- · Bloody or Infectious Waste
- Hydrogen Peroxide
- Thermometers
- IV Bags
- Trash
- Mail

Fishing License Restructure—were you aware that as of March 1 of this year, the Michigan DNR Fisheries Division has changed the fishing license options from 17 to 5? The most significant change is the simplified license types; rather than choosing between a restricted license and an all species license, all licenses now apply to all species of fish. Resident and non-resident anglers have the option of a 24-hour license, a 72-hour license, or an annual license. A senior license continues to be available for Michigan residents age 65 and older.



## Growth Seen In Volumes, Staff Experience

In the Household Hazardous Waste (HHW) realm, several things of note occurred in 2014. First, volume collected at our HHW events was up 54% year to year. Staff noted a considerable increase in business use of the program. This increase in business use of EC Household Chemical Drop-off Days was evident both from how busy the collection events were, and also was reflected by a 55% increase in the dollars collected for the service (\$1 per pound) over just two years, from roughly \$4,000 in 2012 to \$6,200 in 2014.

In part due to the many businesses and their larger-thantypical loads, traffic management during the events was particularly challenging in 2014. Through quick thinking on the spot, staff and volunteers were able to smoothly accommodate all of the cars in two lines between the gatehouse and the event site. Staff are considering moving the event site to the east edge of the Drop-off Center complex, behind the Recycle Tip Building in 2015 to move the traffic quickly away from the entrance and prevent congestion.

Finally in HHW developments, our new Administrative Secretary, Jayna Steffel, emerged as a leader in the Household Chemical Drop-off program. Jayna served as a firefighter for 15 years, during which time she trained constantly, including a 40 hour HazMat training. She immediately took a special interest in the HHW program, bringing an emergency management perspective to the events. At the next opportunity we will send Jayna to the 24-hour HHW-specific HAZWOPER (Hazardous Waste Operations and Emergency Response) training offered periodically by Hazmat Strategies. DPW Communications Coordinator Kate Melby heads up the HHW events and has maintained HAZWOPER certification since 2003. She was pleased to see the department gain greater depth of staffing in this challenging field.

## **POD Education Pops!**

The POD drug disposal program, in which we are a partner, had a remarkable year in 2014, as the Tip of the Mitt Watershed Council (TOMWC) implemented their grant-funded media and education campaign. They conducted a multi-modal pre-survey to measure public awareness of the importance of proper drug disposal and the POD program, then began a series of magazines and television ads. In addition they developed targeted brochures, for example for families with young children and families disposing of medications after a death. A follow-up survey will test how effective these efforts were. The program now also has an excellent website (pillsinthe-pod.com)sponsored by TOMWC and 20 drop-off locations across five counties.



An image used in the new POD educational campaign. Young families are one of the target audiences.

## Hazardous Waste Volume

•	Latex Paint (pounds)43,460
•	Hazardous Materials Collected on Drop-off Days (pounds)
•	Haz Mat Collected Year-Round (pounds) (Hazardous Recyclables Collection Area) 647,380

This represents a 29% increase over 2013!

Total (pounds)

736,160



Volunteer Stream Monitor Training

Volunteer Stream

16 R2: Riparian Rights Event

Elk River Chain of Lakes:

Aquatic Invasive Species Workshop

Waganakising BAY DAY

14 36th Annual Membership Meeting

18 Whale of a Sale Fundraiser **POD Collection Event** 

Harbor Springs - Emmet County

# 11th Annual "Healing the Bear"

Bear River Cleanup

One day only!

July 18

Whale of a Sale A Huge Rummage Sale for Water Recreation Lovers

**POD Collection Event** 

McLaren Northern Michigan -

Petoskey

**POD Collection Event** 

**Boyne City - Charlevoix** 

County

Avian Botulism Monitor Training

July 18, 2015

Bellaire - Antrim County **POD Collection Event** 

Watch for additional events at: www.watershedcouncil.org

> 8:00am - 2:00pm Irish Boat Shop Storage Building, Behind Fairview Plaza, Harbor Springs

Whether you're looking for a boat, kayak, fishing gear, rope, life jackets, or some fun water toys for the cottage, you will find this and a whole lot more at the Whale of a Sale. No early sales. Live auction for boats and larger watercraft begins at noon.

## Do you have items to donate?

Give us a call at (231) 347-1181 for donation forms and drop-off locations.

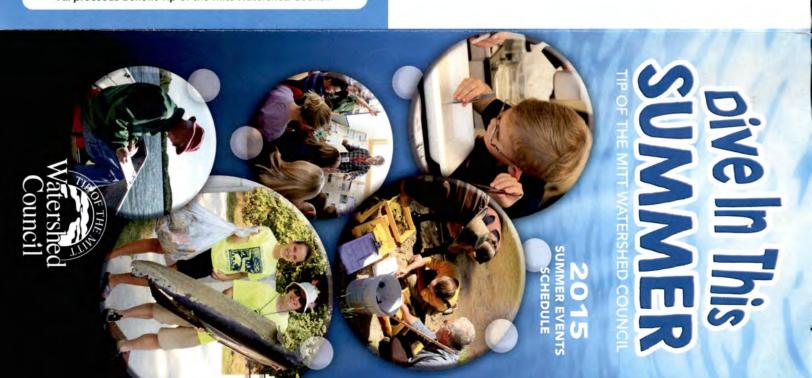
All proceeds benefit Tip of the Mitt Watershed Council.



426 Bay Street Petoskey, MI 49770

Nonprofit Organization U.S. Postage PAID

Petoskey, MI Permit No. 108



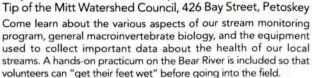
## JOIN THE V-TEAM

No experience necessary ~ Free Training!

## STREAM MONITORING

#### TRAINING

May 9, 2015 ~ 9:00am - 1:00pm



#### FIELD DAY

May 16, 2015 ~ 9:00am - 2:00pm

Volunteer teams collect a representative sample of the aquatic macroinvertebrate population for later identification and also note general stream conditions. Each team monitors two sites on the same river or stream.

#### **IDENTIFICATION DAY**

May 31, 2015 ~ 12:00 Noon - 3:00pm

Volunteer teams gather at the Health Education & Science Center (Room #335) on the campus of North Central Michigan College in Petoskey to sort and identify aquatic macroinvertebrates that were collected in the field.

#### LAKE MONITORING

#### TRAINING DAY

May 22, 2015 ~ 10:00am - 12:00 Noon

Inland Waterway Museum ~ Downtown Alanson

One of our longest running programs, volunteer lake monitoring involves collecting water quality data once a week during the summer months to help us assess the health of our lakes. During the indoor session of the training, we will review the lake monitoring program and go over data collection methods. Afterwards, volunteers will have an opportunity to practice monitoring procedures during a pontoon boat ride on Crooked Lake. At the completion of the training you will receive the necessary equipment and supplies to complete a season of volunteer lake monitoring.

#### AVIAN BOTULISM MONITORING

#### TRAINING DAY

September 16, 2015 • 4:00pm

Location to be determined.

Join us for a free workshop on monitoring avian botulism outbreaks on our Lake Michigan shoreline. We will explain why it is important to understand the conditions that lead to avian botulism and the corrective actions that can help reduce the spread of the toxin that has claimed thousands of birds each year. Monitoring kits and instructions will be provided.

To register for volunteer monitoring opportunities, contact

Dan Myers at (231) 347-1181 or email dan@watershedcouncil.org

## Fun and Informative



## R<sup>2</sup> – Rights and Responsibilities

June 16, 2015 • 5:00pm

Thurston Park, Central Lake Free admission, Public Welcome.

What are your rights on the water? Do you know your responsibilities for living along the Chain of Lakes? Join the Deputy from the Antrim County Marine Patrol and Gail Gruenwald, environmental attorney and Executive Director of Tip of the Mitt Watershed Council, to learn your rights and responsibilities on the water. Wine and hors d'oeuvres following the program.

Sponsored by Grass River Natural Area, Three Lakes Association, Torch Lake Protection Alliance, Friends of Clam Lake, and Intermediate Lake Association. In partnership with Antrim Conservation District and Tip of the Mitt Watershed Council.

## **Aquatic Invasive Species Workshop**

June 17, 2015 • 5:00pm

Antrim Conservation District office, Bellaire

A 3-hour workshop will be held to teach Elk River Chain of Lakes residents how to identify, document, and report a variety of aquatic invasive species. Space is limited. RSVP by calling the Antrim Conservation District office at (231) 533-8363.

## **Waganakising BAY DAY**

June 28, 2015 1:00 - 4:00pm

Bayfront Park, Petoskey Free admission. Public Welcome.

Celebrate the Bay! Join us for a family-friendly water festival at Bayfront Park with hands-on activities for kids. Learn from Northern Michigan's environmental experts on wildlife, water quality, stewardship and recreation. Crafts, boat rides, demonstrations and more! Visit http://www.ltbayday.com for more information.

Sponsored in part by Cranbrook Institute of Science, DTE Energy Foundation, Little Traverse Conservancy, Little Traverse Bay Bands of Odawa Indians, Walloon Lake Association, and Tip of the Mitt Watershed Council.

## **36th Annual Membership Meeting**

July 14, 2015

9:30am - 12:00 Noon Charlevoix Public Library,

220 West Clinton Street, Charlevoix

This summer marks the Watershed Council's 36th year protecting Northern Michigan's water resources. Please join us in a celebration of our accomplishments. Enjoy an informative and inspiring presentation by our newly formed youth education program, the Tip of the Mitt Watershed Academy.

Please RSVP by July 6th by calling (231) 347-1181. No charge for this event.

## **Watershed Protection Events**



## Put Your Pills in the POD!

This is your opportunity to safely dispose of your unwanted and unused medications. Properly

getting rid of unused medicines through the POD collection events helps keep our waters clean and our families and community safe.

July 25 9:00am – 12:00 Noon Emmet County Drop-Off Center 7363 Pleasantview Road, Harbor Springs

Sept 12 9:00am – 1:00pm Boyne City Road Commission Garage Just east of the Boyne City Public School football field

Oct 14 7:00am – 4:00pm McLaren Northern Michigan, Petoskey Use the Hospital Circle Driveway -Entrance off Mitchell Street

Oct 31 10:00am – 2:00pm In front of Antrim County Courthouse 205 E. Cayuga Street, Bellaire

## "Healing the Bear" Bear River Cleanup

August 22, 2015 9:30am - 1:30pm

Bear River Shelter, Petoskey

Join us for this fun event as we remove trash along the river from Walloon Lake Village Park to the Petoskey Waterfront.



Volunteers of all ages and abilities are invited to walk, wade, or canoe as they pick up trash and debris from the area surrounding the Bear River. Breakfast, lunch, and t-shirts are free for volunteers! Meet at 9:30am at Petoskey's Bear River Shelter. **Pre-registration** is encouraged to help plan for this event. Please call Dan Myers at (231) 347-1181 or email dan@watershedcouncil.org.

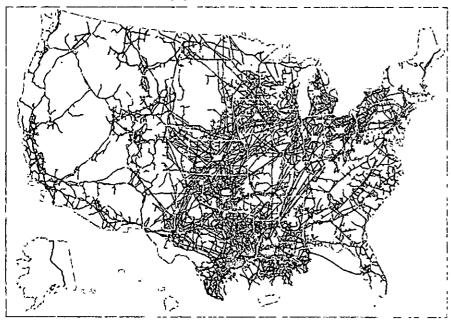
For more information about any of these events, contact (231) 347-1181 or visit www.watershedcouncil.org

## **SUPERIOR TO SARNIA: The Line 5 Pipeline**

Millions of miles of oil and gas transport pipelines crisscross Michigan and the rest of the United States. By their nature, these underground pipelines tend to go unnoticed until a leak or rupture occurs, or there is controversy over building or expanding a pipeline. Recently, Enbridge's Line 5 drew public attention when the company expanded the line's capacity by 10% earlier this year to meet rising demand. Line 5 starts in Superior, Wisconsin, crosses Michigan's Upper Peninsula, goes under the Straits of Mackinac and travels between Burt and Mullett Lakes on its way to Sarnia, Ontario. This line expansion raised concerns about the possible future transport of tar sands through the line and the increased risk of a disaster similar to Enbridge's Line 6B, which caused the 2nd largest inland oil spill in US history. Line 6B was carrying the thick oil produced from the tar sands of northern Alberta, Canada when in 2010, it burst near Marshall, Michigan spilling the heavy and sticky oil into the Kalamazoo River. That spill has cost Enbridge \$1 billion and the clean-up is not yet complete.

The Watershed Council met with Enbridge and government agency representatives, emergency preparedness agencies, and local lake association representatives. We presented the question to Enbridge

Major natural gas and oil pipelines in the U.S.



Hazardous liquid lines are shown in red. Gas transmission lines are shown in blue. Photo: Pipeline and Hazardous Materials Safety Administration

– how are you going to ensure all of us in Northern Michigan that what happened to the Kalamazoo River won't happen to Lake Michigan, Lake Huron, Douglas, Burt, and Mullett Lakes and the rivers Line 5 crosses on its way to Sarnia?

Enbridge insisted that they have no intention of using Line 5 to transport the heavy oil produced from tar sands, though there are no long term assurances to that effect. Enbridge has improved its detection system as well as its integrity monitoring process since the spill in Marshall. However, the line which transports almost 541,000 barrels a day of light and medium crude or natural gas could still pose a risk if leaks and ruptures occur. The steps taken by Enbridge are reassuring; however, much more can be done to protect our precious waters from a spill.

The Watershed Council plans to assess risks to our waters by reviewing the exact path of the pipeline and comparing it to our map layers of the most sensitive areas in Northern Michigan. We will advocate for additional assurances from Enbridge, such as extra shut off valves near water features, more booms, and other emergency preparedness equipment. We will also review

the government inspection process. Our concern is that we are relying on industry self-inspections because there are only 120 inspectors for all 50 states.

In addition, the Watershed Council will thoroughly research pipeline repair and replacement procedures. There have been calls for replacing the 60-year-old section of Line 5 that goes under the Straits. Is replacement appropriate? We will investigate this and many more questions and report to our members throughout the coming months. For more information contact our office and ask for Jennifer McKay or Grenetta Thomassey (231-347-1181). An additional resource is the website of the Pipeline Safety Trust at www.pstrust.org. Of particular note on this website are the pages "Pipeline Info for Beginners" and "State by State Pipeline Information."

# Tip of the Mitt Watershed Council

Aquavist ('ä-kw-vist) noun: A member of Tip of the Mitt Watershed Council's Local Activist Network; from Aqua - water, and Activist - one who seeks change through action.

## **UPDATE: WATERSHED PLAN WORK**

#### ELK RIVER CHAIN OF LAKES

The Elk River Chain of Lakes Watershed Plan Implementation Team (ERCOL-WPIT) has been hard at work in Antrim County. In January, we held our Second Annual Local Government Event, which was well attended by public officials. Additionally, a Waterways Work Group was formed this year to install a pilot project of several log structures, known as Large Woody Debris, along the banks of the Grass River between Lake Bellaire and Clam Lake. This project was based on recommendations from river sedimentation studies carried out by the ERCOL-WPIT in prior years, and was the result of coordinated efforts of eight partner organizations and the Antrim County Operator of Dams.

#### LAKE CHARLEVOIX

The Lake Charlevoix Watershed Plan Advisory Committee has also been hard at work. In addition to achieving formal plan approval in 2012, the committee is now working on a brand new Michigan Department of Environmental Quality/United States Environmental Protection Agency grant to implement the plan. In Septembet, we hosted a well-attended First Annual Local Government Event to highlight numerous recent successes. New projects include working with the City of Charlevoix, Boyne City, and East Jordan on stormwater issues, watershed septic system issues, and working with zoning administrators and planners on shoreline protection and enforcement, among others.

#### LITTLE TRAVERSE BAY

In coordination with the Little Traverse Bay Watershed Plan Committee, a team of University of Michigan Master's Project students finished a sub-watershed management plan for Tannery Creek in 2013. We also created a unique, updated brochure of the plan summary, highlighting the many accomplishments made in the first five years of implementation. We held a well-attended Second Annual Local Government Event in April, and kicked off a "Stormwater Matters" media campaign around the Watershed. Committee members also participated in four outstanding Great Lakes Restoration Initiative (GLRI) grant projects, which will be wrapped up in coming months. Committee members are currently working to prioritize plan steps for the next five years, in order to identify and target funding opportunities.

#### **CHEBOYGAN COUNTY**

In 2013, work began to create a new watershed management plan for Duncan and Grass Bays, located on Lake Huron, east of the City of Cheboygan. They fall outside of the Cheboygan River Watershed, so there have been no prior watershed protection plan activities. The plan will also cover the eastern portion of the City. We are also very excited to begin working on a new watershed management plan for the Burt Lake Watershed, which includes the Maple, Sturgeon, and Crooked Rivers. Stay tuned – there will be lots more information on this work, funded by grants from the Michigan Department of Environmental Quality and U.S. Environmental Protection Agency.

## Watershed Council Awarded \$99,795 Grant to Enhance POD Program

Tip of the Mitt Watershed Council received a grant in the amount of \$99,795.67 from the Michigan Department of Environmental Quality Community Pollution Prevention Grant program to expand Northern Michigan's Pharmaceutical and Over-the-counter Drug Drop-Off (POD) Program during 2014 and 2015.

The POD Program was initiated to address the growing concern of unused and expired pharmaceuticals polluting our waterways, poisoning our children, and putting our public safety at risk. The POD Program provides the opportunity for citizens to safely dispose of prescription, over-the-counter pharmaceuticals, and personal care products for free at community collection events and permanent collection drop boxes, located at law enforcement agencies. To date, we have collected over 8,100 pounds of unwanted and unused medications.

The grant will enhance the POD program by funding targeted education and outreach to key audiences and a focused media campaign. The purpose is to increase awareness, access, and use of the POD Program by Northern Michigan community members.

Through this project, we will be able to reduce the quantity of pharmaceuticals and personal care products entering Michigan's surface, ground, and drinking waters, as well as support law enforcement's efforts to keep these drugs out of the hands of people who will sell them, abuse them, and commit crimes while under their influence.

For more information about the Prescription and Over-thecounter Drug Drop-off Program or how to properly dispose of medications, visit www.watershedcouncil.org.

# Watershed Council

## PUT YOUR PILLS IN THE POD

Tip of the Mitt Watershed Council has embarked upon a media and education campaign to raise awareness about the Northern Michigan Prescription and Over-the-Countet Drug Drop-off (POD) Program.

The POD Program is a multicounty take-back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. Currently, the POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan.

The POD Program boasts five successful years of implementation. However, there are still many people who are not aware of the program or who are not using this community service to properly dispose of their unused medications. So we are reaching out – through magazine and television ads and targeted outreach – to tell everyone to Put Your Pills in the POD!

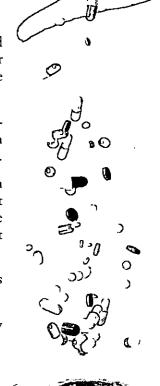
With more than 42 million people living around the Great Lakes, an untold number flush unused and expired medications down the toilet every day. These medicines end up in sewage treatment plants or septic systems that are not designed to remove them. Only about half of the prescription drugs in sewage are removed-by treatment plants, the rest end up in our waters.

Over 80% of waterways tested in the United States show traces of common medications, such as acetaminophen, hormones, blood pressure medicine, codeine, and antibiotics. Additionally, an investigation by the Associated Press found that medicines are also in the drinking water supplies of 41 million Americans.

Although these contaminants are found at very low levels, we do not know their long-term effects on animal populations. Animals that were never intended to ingest these compounds get a daily dose at their local watering hole. Even worse, fish and other aquatic animals are constantly exposed to the pharmaceutical mixture. Some of these chemicals interfere with or mimic natural hormones and disrupt reproduction, development, and behavior of fish and other organisms.

By putting your pills in the POD and properly disposing of unwanted medications, you will help us keep our lakes, rivers and drinking water clean and our communities and families safe.

For more information or locations where you can Put Your Pills In The POD and for a list of the many POD partners, visit www.PillsInThePOD.com.



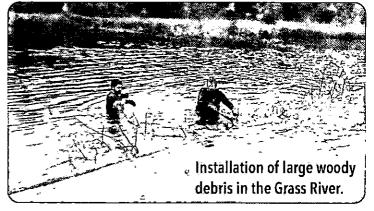


# Grass River Large Woody Debris Demonstration Project

Last summer, the Grass River in Antrim County received a very large dose of tender loving care. This summer, we are anxious to review the results of that attention, which comes in the form of a pilot project of several log structures known as large woody debris. Located along the banks of the Grass River between Lake Bellaire and Clam Lake on the Elk River Chain of Lakes, this small-scale project is designed to do two things. First, it should demonstrate whether log structures can improve the aquatic habitat of a river laden with a heavy load of sediment. Second, it should also determine if log structures along the banks of Grass River could be a useful technique to improve the navigability of a connecting river by deepening portions of the channel that have become shallow, due to the buildup of sediment.

The Elk River Chain of Lakes Watershed Plan Implementation Team (ERCOL-WPIT) addressed sedimentation build up in both the Grass and Rapid Rivers as one of our very first issues of concern, when we formed in 2010. Importantly, this pilot project is compatible with the Grand Traverse Bay Watershed Management Plan. Recommended plan steps endorse practices that help constrain unnaturally wide channels and concentrate flow into deeper, narrower channels. The Plan also recommends habitat improvements, as well as the control of sedimentation. As such, the ERCOL-WPIT fully supports this project.

Three Lakes Association (TLA) and Elk-Skegemog Lakes Association (ESLA) funded a study done by Michigan State University researchers in 2012, and used those results to propose this project. A Waterways Work Group coordinated efforts of the Antrim County Operator of Dams and several organizations, including Grass River Natural Area (GRNA), the Antrim Conservation District, Friends of Clam Lake, TLA, and ESLA. The Antrim



County Board of Commissioners contributed funding and authorized the Operator of Dams to manage the project. Antrim County also applied to the Michigan Department of Environmental Quality (MDEQ) for a permit to install the structures, with the involvement of the Michigan Department of Natural Resources (MDNR) Fisheries Division. The County hired Mr. Ken Reed, who has installed hundreds of these structures in Northern Michigan waters.

Volunteers from the Work Group implemented the project. Antrim County, several local businesses, and TLA provided funding donations to cover installation of several structures. If successful, the log-structures technique could be applied at a number of sites on connecting channels throughout the Chain of Lakes.

For one of our "Wednesdays on the Water" events, the Watershed Council will team up with the Antrim County Operator of Dams, Mark Stone, to tour this project on the Grass River and see how things are progressing. If you are interested in joining that tour, please call our office at (231) 347-1181 to register for the event.

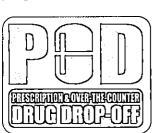
Aerial view of the completed Grass

large woody debris project that was installed to improve aquatic habitat and improve navigability



## POD commercial created by NCMC students

Meet the talented people behind the Watershed Council's new POD commercial. Animation students from North Central Michigan College took on a special project with enthusiasm and dedication. We wanted to provide the students with a real world opportunity, somthing they could put in their portfolio as they progress in their careers. Working with the animation instructor, Anne Morningstar, we were able to create a special program that allowed them to earn college credit for their work. They also



learned about the POD program and were able to share our important message with all of Northern Michigan using their newly learned skills. The animated commercial can be seen on local network stations ABC, CBS, Fox, and NBC.

Above left to right: Logan Ward, Michael Harlan, Shelby Stevens, and Joey Anderson.

## You're never too young to pitch in

Simon Gelb, age 7, shows off over 1,200 mail pieces he sealed and ran through the postage machine. This batch was being mailed to shoreline home owners on Walloon Lake. Keep up the good work, Simon!





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# Join us in welcoming the new WATERSHED ACADEMY

Tip of the Mitt Watershed Council is excited to announce the launch of our new youth education program – the Tip of the Mitt Watershed Academy! The Watershed Academy aims to foster greater awareness and understanding of water resources by engaging local students in meaningful explorations of their watersheds. Students are provided with the tools, techniques, and knowledge to translate small-scale research projects into a long-term regional stewardship ethic. As a project-based enrichment program, the Academy focuses on watershed conservation, protection, and restoration.

The structure of the Watershed Academy involves school-based teams. This semester, the Watershed Academy is comprised of 9th and 10th grade biology students from Boyne City, Alanson, East Jordan, Harbor Springs, and Pellston, with 9-10 representatives per school. Under the guidance of Maria Affhalter, an environmental education consultant, and

Membels of the Boyne City Watershed Academy team learn about the impacts of polluted stormwater runoff during their first session.

Watershed Council AmeriCorps volunteer, Mackenzie Dix, students are encouraged to become experts of their "adopted stream," a stream located in their respective communities. The Academy consists of a series of monthly classroom visits, a field day, and the Watershed Academy Summit. Classroom sessions include setting the stage for science-based investigation and learning the skills necessary to conduct research on their adopted stream, including water quality monitoring methods, benthic macroinvertebrate sampling and identification, and habitat surveys. The field component includes a full day of data collection with assistance from Watershed Council staff and other natural resource professionals, such as the Little Traverse Conservancy and Little Traverse Bay Bands of Odawa Indians.

Teams will work to analyze results, identify water quality impairments, and prepare a management plan that includes recommendations for protection and restoration of their stream. In early June, the Watershed Academy Summit will bring together all five teams for a community-wide presentation of their projects and to celebrate their achievements. In addition, students will communicate their progress and share ideas via an online Google Community created specifically for the Academy and moderated by the Watershed Council.

We will begin another semester session in the fall and continue this cycle of two Watershed Academies per year. We plan to expand the program to additional local high schools in the fall of 2015. Furthermore, one of the long-term goals is to conduct "foundation laying" activities aimed at 6th and 7th grades and some "graduate" activities for interested 11th and 12th grade students.

Look for more information about the Watershed Academy in future *Current Reflections* newsletters, at www.watershed council.org, or our Facebook page. Feel free to contact us with questions: Maria (maria@watershedcouncil.org) or Mackenzie (mackenzie@watershedcouncil.org) or call our office at (231) 347-1181.

Support for the Watershed Academy comes from: Charlevoix County Community Foundation, Petoskey-Harbor Springs Area Community Foundation, Little Traverse Conservancy, Tip of the Mitt Watershed Council, and the Great Lakes Fishery Trust.

## POLICY UPDATE

Tip of the Mitt Watershed Council staff are always working at the State and Federal levels on a variety of policy issues. Here are updates on a few of the many priorities we are working on.



#### Asian carp

Recently, the U.S. Fish & Wildlife Service released eDNA results, which showed multiple positive hits for silver carp upstream of the electric barrier near Chicago, designed to prevent Asian carp from entering the Great Lakes. This finding underscores the urgent need for immediate action. A bill was introduced, Defending Our Great Lakes, which directs the U.S. Army Corps of

Engineers (USACE) to implement interim technologies to control the upstream movement of aquatic invasive species from the Mississippi River. Until we can get hydrologic separation in place, it is imperative that we take these interim measures to shore up our defenses.

#### **GLEEPA**

The Great Lakes Ecological and Economic Protection Act (GLEEPA) was introduced by U.S. Senators Tammy Baldwin (D-Wis.), Mark Kirk (R-III.), and Debbie Stabenow (D-Mich.). This bill will strengthen Great Lakes restoration efforts that are benefiting the environment and economy in communities across the region. The bill puts in place a permanent Great Lakes restoration framework to guarantee continued restoration success. By authorizing Great Lakes Restoration Initiative (GLRI) resources and targeting them efficiently, we can continue to improve water quality, protect the health of our citizens and wildlife, create jobs, and maintain our Great Lakes quality of life.

#### Clean Water Act

The Environmental Protection Agency and the USACE are poised to finalize a landmark rule clarifying longstanding Clean Water Act protections. The rule provides clear and predictable protections for many streams, wetlands, and other waters, while streamlining

the permitting process. It gives greater certainty to individuals, developers, farmers, companies, and facilities — industrial or municipal — that discharge into what are known as "waters of the U.S.," or that affect the health of those waters. However, a wide range of industries are lobbying furiously to have Congress stop the rule. Congress should support the Clean Water rulemaking and oppose all efforts to intervene legislatively, to ensure the protection and restoration of our nation's waters.

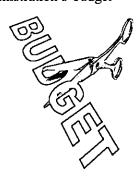
#### Fracking

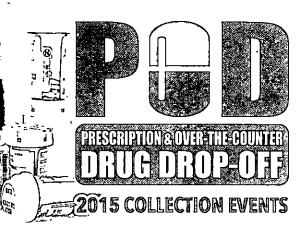
Last year, the Michigan Department of Environmental Quality (MDEQ) proposed new rules for oil and gas operations using high volume hydraulic fracturing in order to fill gaps in the existing regulation requirements. However, the MDEQ's final rules still contain significant deficiencies and do not adequately protect Michigan's rivers, lakes, and streams. In particular, the proposed rules do not require companies to publicly disclose the chemicals that are used during the fracking process, before a well is in use. Furthermore, they do not provide sufficient standards to protect our freshwater resources from the negative impacts of large water withdrawals.

#### Great Lakes Restoration Initiative (GLRI)

For the second year in a row, the Obama administration is recommending cutting federal efforts to restore and protect the Great Lakes – a resource that more than 30 million people depend on for drinking water. The Obama Administration's budget

slashes the GLRI from \$300 million in fiscal year 2015 to \$250 million. GLRI supports efforts to clean up toxic pollution, restore fish and wildlife habitat, combat invasive species, and reduce runoff from farms and cities. Congress ultimately holds the purse strings, so we need Congress to restore funding to Great Lakes protection efforts.





A free, safe, and environmentally sound way to dispose of your unwanted or unused medications. For additional information visit www.PillsInThePod.com

**APRIL 21, 2015** 10:00 a.m. - 2:00 p.m. McLaren Northern Michigan, Cheboygan Campus Entrance North of the Emergency Department

**APRIL 22, 2015** 7:00 a.m. - 4:00 p.m. McLaren Northern Michigan, Petoskey Campus Hospital Circle Driveway - Entrance off Mitchell Street

**APRIL 25, 2015** 10:00 a.m. - 2:00 p.m. In front of Antrim County Courthouse 205 E. Cayuga Street, Bellaire

JULY 25, 2015 9:00 a.m. - 12:00 Noon **Emmet County Drop-off Center** 7363 Pleasantview Road, Harbor Springs SEPT. 12, 2015

9:00 a.m. - 1:00 p.m. **Boyne City Road Commission Garage** Just east of Boyne City Public School football field

OCT. 14, 2015 7:00 a.m. - 4:00 p.m. McLaren Northern Michigan, Petoskey Campus Hospital Circle Driveway - Entrance off Mitchell Street

OCT. 31, 2015 10:00 a.m. - 2:00 p.m. In front of Antrim County Courthouse 205 E. Cayuga Street, Bellaire

## Are Great Lakes diversions a case of California Dreamin'?

In case you haven't heard, there is a serious drought in California. To give you an idea about what is going on, here are some headlines that have appeared on Twitter since early May, 2015:

Southland saying goodbye to lawns - Los Angeles Times

Political answers scarce as water in parched California - Politico

California farmers submit plans to save water under deal - Associated Press

On April 1st, California Governor Jerry Brown ordered cities and communities to cut their water usage by 25%. That day, the Governor said: "Today we are standing on dry grass where there should be five feet of snow. This historic drought demands unprecedented action." The snowpack in the mountains of the West has been dramatically sparse for a few seasons. However, this past winter created the dry grass to which the governor referred. He added, "Therefore, I'm issuing an executive order mandating substantial water reductions across our state. As Californians, we must pull together and save water in every way possible." (CA.gov; Office of the Governor website; accessed June 7, 2015; press releases April 2015)

#### Photos of the parched reservoirs and lakes in the state are alarming.





Lake Oroville, CA

Photo: California Department of Water Resource



Lake Shasta, CA. California's lingering drought exposes the 180-200 foot drop in water levels. The state's largest reservoir is receding at an average of 4.9 inches per day.

Photo David Greitzer Shutterstock com.

## What is the Great Lakes Compact and how does it relate?

Climate change could create serious drought conditions in many places, including the Great Lakes Basin. The Great Lakes Compact is a tool that protects us from pressure to provide water to other areas, using large-scale diversions such as

water pipelines to the Southwest. The Compact is an agreement among the eight U.S. Great Lakes states to prevent diversions and withdrawals that would harm the Great Lakes ecosystem.



The fear of water diversions for thirsty Western states inspired this billboard seen around the Grand Rapids area in 2001. Highway billboards with the message "Back Off Suckers. - Water Diversion... The Last Straw" were sponsored by the nonprofit group Citizens for Michigan's Future.

The Great Lakes are one of America's national treasures and a natural wonder of the world. We have a responsibility to protect them. The Watershed Council led a statewide coalition to get the Compact passed in Michigan, which took effect in 2008. There is also a formal Agreement among the Great Lakes states and the Canadian provinces of Ontario and Quebec,

The Great Lakes are one of America's national treasures and a natural wonder of the world. We have a responsibility to protect them. working together to protect water resources of the Basin. The Compact and the Agreement are identical, creating a united front to prevent harmful withdrawals, diversions, and waste. Pursuant to the Compact, all Great Lakes states have established water withdrawal permitting programs. The Compact requires anyone outside the Basin who wants to use Great Lakes water to

meet strict criteria. It specifies that the states and the Compact Council (a regional body created by the Compact) must review any new diversion or withdrawal of Great Lakes water. These provisions prevent droughts in other regions, such as California, from impacting and putting more stress upon the waters of the Great Lakes.

Continued on page 2

## **WELCOME: University of Michigan SNRE Team**

As noted in our last issue, the Elk River Chain of Lakes Watershed Plan Implementation Team (ERCOL-WPIT) successfully recruited a group of five Master's Project students from the University of Michigan School of Natural Resources and Environment (SNRE). This talented team will produce a comprehensive first draft of a brand new Watershed Management Plan for the ERCOL. The students will be in the field this summer, helping to collect new information and working remotely to analyze existing data collected from the area. The information will serve as the foundation of the new plan.

Lauren Silver is the team coordinator. She is working on a Master of Science in Conservation Ecology. Her Bachelor of Arts is from the University of Michigan Program in the Environment.

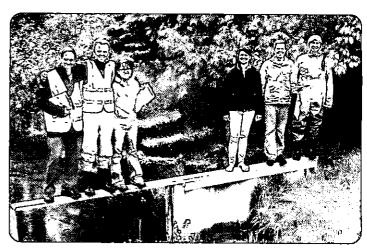
Elliot Nelson is working on a Master of Science in Behavior, Education, and Communication. His Bachelor of Science in Biology is from Michigan State University.

Stephanie Miller holds a Bachelor of Science in mathematics from the University of Wisconsin-Milwaukee and is working on her Master of Science, Environmental Informatics.

**Brandon List** has a Bachelor of Landscape Architecture from Michigan State and is a Master of Science candidate in Sustainable Systems.

Kevin Peterson graduated from Calvin College with a Bachelor of Science in Biology. His Master of Science includes concentrations in Conservation Ecology and Environmental Informatics.

Lauren and Elliot will work this summer with Policy Team intern, Althea Arnold. They will set up two town hall meetings to explain the new watershed management plan and get public feedback. Watch for announcements about dates and locations.



SNRE team members Lauren Silver (third from right) and Elliot Nelson (far right) are shown above, during a staff-led road stream crossing survey training that took place this spring.



## Put Your Pills in the POD!

The best solution to dispose of old, unwanted, and expired mediculous is through Northern Michigan's Prescription and Overthe-Counter Drug Dropoff (POD) Pregram. Through the POD program, residents can safely dispose of prescription, overthe-counter pharmaceuticals, and personal care products for free.

By using the POD Program and properly disposing of unwanted pharmaceuticals at one of the following collection events, you will help keep our rivers and chinking water clean and our communities and families safe.

## UPCOMING EVENTS

Securdary, July 25, 2015 9:00 a.m. 42:00 Noon Emmet County Drop-Off Center 73:69 Pleasent view Roed, Herbor Springs

Seturdery, September 12, 2015 9:00 am. 4:00 pm. Boyne City Road Commission Grage Just cast of the Boyne City Public School football field Wednesday, October 14, 2015
7:00 am. -4:00 pm.
Mdaren Northem Midrigen, Petoskey Campus
Hospital Circle Driveway-Entrence off Mitchell
Theywill also be accepting sharps, cell phones,
shoes, eyeglasses, and hearing eits for proper
disposal/regyding.

Seturday, October 31, 2015 10:00 am. - 2:00 pm. Infontof Anthin County Counhouse 205 E. Cayung Street, Belletre

Cantimate it to a collection event? The POD Program also includes over 20 permanent collection deep boxes throughout Northern Michigan. Visit www.pillsinthepock.com to find a location near you.



## Quaggas Drift Inland From the Freshwater Seas

Adrift in the freshwater seas, an unfathomable number of microscopic veligers (invasive mussel larvae) move through the Great Lakes at the mercy of wind, waves, and currents. Within a few days of inception, veligers develop new organs and a minute shell. Between 20 to 90 days, they begin to attach to rocks, wood, or even to other mussels on the lake bottom. Their reproductive and colonization strategies have given quagga (and zebra) mussels a competitive edge that has resulted in their spread to freshwater lakes and streams across the entire planet. Of course, humans and our global economy have greatly accelerated their spread with mussels hitching rides on boats and trailers.

While conducting an aquatic vegetation survey on Crooked Lake in early July, a handful of tiny mussels on the stems of aquatic plants caught the attention of AmeriCorps volunteer Matt Claucherty. Watershed Council field staff are accustomed to finding zebra mussels clinging to aquatic plants, which is why we strongly encourage removing weeds from boats and trailers, and why state law requires it. But these were different. Matt noticed slightly different coloration and patterns, but the clinchet was the hinge side of the shell — it was rounded, not flat like that of the zebra mussel. Suspecting quagga mussels, specimens were sent to Ann Arbor where mussel researcher Ashley Baldridge, PhD, confirmed that there was a new invasive mussel in Crooked Lake.

Practicing due diligence, Matt immediately reported the infestation to the Midwest Invasive Species Information Network (MISIN), where he found this was the first report of quagga mussels in an inland lake in Michigan. Upon learning this, the Watershed Council shared the discovery with partner organizations, State and

Federal agencies, and the media. This breaking news reverberated throughout the State, picked up by newspapers from Petoskey to Detroit.

Quagga mussels were first discovered in Lake Erie in 1989, just three years after the discovery of zebra mussels, but they did not spread and proliferate as quickly as the zebras. Mussel studies in Lake Michigan showed an explosion in quagga mussel populations in the early 2000s, reaching an estimated 950 trillion by 2011 – that's well over 100,000 mussels for every human on earth, and just in Lake Michigan! It seemed inevitable that they would spread to our inland lakes.

Although Matt only found quaggas at three locations near the Little Traverse Boat Launch on US31, subsequent surveys by the Pickerel-Crooked Lake Association determined they are present in other areas of the Lake. In addition, we learned that quagga mussels were found in Mullett Lake in 2012, but never reported on MISIN. Therefore, these invasive mussels will invariably spread to other lakes and streams throughout the Inland Water Route, if they haven't done so already.

What are the implications to the lake and stream ecosystems of the Inland Water Route? The answer is that we are unsure. Little research has been conducted on quagga mussel infestations in inland waterways. However, if changes brought on by quagga mussels in the Great Lakes are any indication, there may be serious and perhaps dire ecosystem changes on the horizon. Nutrient cycles and food webs could be significantly disrupted, which could lead to problems such as excessive algae growth and reductions in top predator (sports fish) populations.

Continued on page 2



Although quagga mussels were only recorded at three locations on Crooked Lake near the boat launch on US31, subsequent surveys by the Pickerel-Crooked Lakes Association determined quaggas are present in other areas of the Lake as well.



On August 2nd, a cluster of severe storms battered the Watershed Council's service area. Especially hard hit was the southern end, from Antrim County towards Kalkaska, including Elk-Skegemog Lakes. Shoreline damage was extensive on many west-facing properties, primarily due to the uprooting of trees from high winds. This storm flattened beautiful stands of shoreline cedars and damaged quite a few homes. Events like this highlight the need for resilient shorelines. As climate changes result in more extreme weather, shoreline protection is more important than ever.

Energy absorption is the name of the game. Be it wind, waves, or ice, a healthy greenbelt consisting of a diverse community of deep-rooted native plants has a greater capacity to withstand these forces. Their roots help to knit together soils and their

stems and foliage buffer shorelines from harsh winds and waves. It's true that a robust greenbelt will not stop the next "F5" twister, but it will help prevent your shoreline from slumping, eroding, and succumbing to the elements.



Shoreline damage on Elk Lake after a major storm this past August.

## POD UPDATE: 2015 a Record Collection Year!



This year marked the most successful year yet for the seven-year-old Prescription and Over-the-Counter Pharmaceutical Drop-off (POD) Program.

The POD Program is a multi-county medication drug take back initiative to provide a convenient and environmentally sound way for residents to properly dispose of medications. The POD Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties. The POD Program also includes over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan. Residents may safely dispose of prescription, over-the-counter pharmaceuticals, and personal care products for free, keeping our rivers and drinking water clean and our communities and families safe.

In 2015, we disposed of over 7,000 pounds of unwanted and expired medicines and personal care products. This is over 2,500 pounds more than the POD Program disposed of in

2014! That is a remarkable volume of drugs that we prevented from contaminating our water resources or falling into the wrong hands. Impressively, over 20,000 pounds of unused and unwanted medicines and personal care products have been collected and disposed of properly since the inception of the program in 2008. This includes approximately 300 pounds of controlled substances, such as OxyContin, Morphine, Hydrocodone, and other drugs that are regulated by the federal government due to high risk for abuse and addiction.

This program would not be as successful without the support of funders, local partners, and community members who use the program. Thanks to everyone who has helped make the POD Program an extraordinary accomplishment for Tip of the Mitt Watershed Council and Northern Michigan!

Learn more about the POD Program, drop-off locations, and collection events at www.PilisinThePOD.com

## Enter to win a \$50 Visa Gift Card

For the following questions, check all that apply.

Who does the medication dropped off today belong to?						
☐ Friend or other household	☐ Pet	□ Other				
dication in the POD box	before to	day?				
used a POD collection box?						
ired/ unwanted medications befo	ore today?					
☐ Trash	<b>⊐</b> P0:	D Community Collection Event				
someone else for use 🔲 🗅 🗅	ther					
What type of medications/materials did you dispose of?  ☐ Prescription/Over-the-Counter Medications ☐ Personal Care Products ☐ Other						
What factors impacted your decision to dispose of medications using the POD Box?  ☐ Convenience/ease ☐ Concern with drug misuse/abuse						
☐ Risk of accidental poisoning ☐ Environmental Contamination		of other preferable options				
☐ Cleaning of household or medicine cabinet						
his POD collection box	?					
☐ Friend/Word of Mouth☐ Flye	er/Brochure					
☐ Internet/Social Media ☐ Other						
	☐ Friend or other household  dication in the POD box used a POD collection box? irred/ unwanted medications beform ☐ Trash someone else for use ☐ Collections ☐ Personal Care  tr decision to dispose of ☐ Convenience/ease ☐ Environmental Contamination in e cabinet  his POD collection box' ☐ Friend/Word of Mouth☐ Flye	☐ Friend or other household ☐ Pet  dication in the POD box before too used a POD collection box? ☐ Trash ☐ POI someone else for use ☐ Other  /materials did you dispose of? edications ☐ Personal Care Products ☐ Other ☐ Convenience/ease ☐ Conce ☐ Environmental Contamination ☐ Lack of the cabinet ☐ Other ☐ His POD collection box? ☐ Friend/Word of Mouth☐ Flyer/Brochure				

Thank you for taking the time to complete this survey.

If you would like to be entered into the drawing to win one of three \$50 Visa Gift Cards, please fill out the back of the survey with your contact information.

## Please complete this portion to be entered into our drawing.

Name:	<del>.</del>	
Mailing Address:		
City/State/Zip:		
Phone:		
Email:		



This survey is being conducted by Tip of the Mitt Watershed
Council as part of a project supported by the Community
Pollution Prevention Grant Program, Michigan
Department of Environmental Quality.

VISA Gift Card Prizes generously donated by:



Entor to win a prizel	Share yo	our comments about the POD Program?
Entor to win a prizel		
		Enter to win a prize!

Name:	
Address:	
Phone Number:	
Email Address:	

### **Prize Descriptions:**

- A gift certificate for a one night stay at Stafford's Perry Hotel in Petoskey, Michigan. Valid through 10/01/2016, excludes holidays and the month of July.
- One half-day guided fishing trip provided by Inland Route Fly Fishing.
   Available for 1-2 people on Northern Michigan's lakes or rivers.
- \$100 Visa Gift Card
- \$50 Visa Gift Card

## Thank you for taking the time to complete this survey.

For more information about the Prescription and Over-the-Counter Drug Disposal (POD) Program, including a list of drop-off location near you, visit www.PillsinthePOD.com or contact Tip of the Mitt Watershed Council at 231-347-1181.

Special thanks to the following businesses that generously donated prizes for the drawing!



First Community Bank www.firstcb.com 866-526-2114 Info@firstcb.com



Inland Route Fly Fishing

Inland Route Fly Fishing www.inlandrouteflyfishing.com 231-622-2317 info@inlandrouteflyfishing.com



Stafford's Hospitality www.staffords.com 800-737-1899 hospitality@staffords.com Survey Number: 17011



# Help us protect Northern Michigan's waters by filling out this survey!

We are gathering information on drug disposal behaviors of Northern Michigan residents to help gage the awareness and use of the Northern Michigan Prescription and Overthe-Counter Drug Disposal (POD) Program to evaluate the success of recent education and outreach efforts. This survey is being conducted by Tip of the Mitt Watershed Council as part of a grant project supported by the Community Pollution Prevention Grant Program, Michigan Department of Environmental Quality.

As a THANK YOU for completing and returning this survey will be entered into a drawing to win one of the following prizes:

- A free one night stay at Stafford's Perry Hotel
- A half day guided fishing trip with Inland Route Fly Fishing
  - \$100 Visa Gift Card
  - \$50 Visa Gift Card

To be eligible to win one of the prizes, you must return the completed survey by October 15, 2015.

At the end of the survey, you will be asked for some personal information, including name, address, telephone number, and email address. These fields will be used solely to contact the winners of the survey prize drawing. Participation in the drawing is optional; you can still give feedback without entering the drawing.

The entire survey will require less than 5 minutes to complete.

Unless stated otherwise, please select only one answer for each question. For your convenience, you can either fill out this survey, place in return envelope provided, and mail it back to us or fill it out online at <a href="https://www.surveymonkey.com/s/PillsinthePOD">https://www.surveymonkey.com/s/PillsinthePOD</a>.

Thank you for your participation and your invaluable feedback!

**SAVE POSTAGE** Complete this survey online! https://www.surveymonkey.com/s/PillsinthePOD. Use the Survey Number at the top of the page.



1.	Are you aware of the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan?  Yes	expired, or unwan	ted medications?	ram, how do you currently (Select all that apply)	dispose of your unused,
	O No, I am not aware	O Dispose of them			
	O No, but I would like to learn more about it	O Throw away in the	ne garbage		
	No, but I would like to learn more about it	O Burn them			
2.	How did you hear about the POD Program? (Select all that apply.)	Return to pharm	асу		
	TV Commercial	O Keep them in un	locked cabinets o	or storage	
	O Magazine advertisement (please specify, if possible)	O Keep them in lo	cked cabinets or s	torage	
	Newspaper (please specify, if possible)	O Give them to a r	elative/friend		
	O Advertising on buses	O I don't have any	unused or expired	d medications to dispose of	
	O Website	O I don't know how			
	O Social media	O Other (please sp			
	O Brochure				
	O Flyer	8. What is the estima	ted amount of un	nused, unwanted, or expire	d medications that you h
	O Community organization (ex. newsletters, meetings, presentations)	disposed of in the  Less than 1 pour			
	O Word of mouth	O 1-5 pounds	iu		
	O I have not heard of the POD Program	O Over 5 pounds			
	O Other (please specify)	O None			
3.	The POD Program has raised my awareness about how and where to properly dispose of unwanted, unused, or expired medications.	9. How frequently do O Once a month of		inused, unwanted, or expir	red medicines?
	Agree		237,40		
	O Disagree	<ul> <li>A few times a ye</li> </ul>	ar		
	O Neither Agree or Disagree	O Once a year			
	O I am not familiar with the POD Program	O Once every few	years		
		O Never			
	Have you used the POD Program in Northern Michigan in the past 12 months?  Yes	10. What is the best wa unused, unwanted,	ay to get informa and expired med	ition to you about how and dications?	where to dispose of
	O No	O Media advertisin	g (ex. TV, newspa	per, magazines)	
	O No, but I will now	O Social media (ex.			
	O I have not before and I will probably not in the future	O Webpage		.,,	
5	If you have used the POD Program, what method of POD disposal did you use?	O Brochures/hando	outs		
	Community collection event			vernment/community group	s (ex Nowslottors
		meetings, and co		verninent/community group	os (ex. Mewsietters,
	<ul><li>O Permanent drop box at a law enforcement office</li><li>O Both</li></ul>	O I'm not interested		modications	
		O Other (please spe		riedications	
	O I have not used the POD Program	Other (please spi	ecity)		
6.	What factors made you use the POD Program? (Select all that apply)	11. In what county do y	ou reside?	12. What is your age?	13.What is your gend
	It is the most convenient method	O Antrim		O Under 20	O Male
(	O This is the only method I'm aware of	O Charlevoix		O 21-40	Female
(	This method provides the most privacy	Cheboygan		O 41-59	
(	O I feel more comfortable disposing of medications at law enforcement offices	O Emmet		60 and over	
(	O Other (please specify)	O Other (please spe	ecify)		
		,	= 11	Continu	ie to next page

# Small beginnings, big impact.

Watershed Council

Watch our 35th Anniversary Video online at www.watershedcouncil.org.
The video features interviews with members and staff that have shaped our organization over the past 35 years.

Over the past 35 years, Tip of the Mitt Watershed Council has transformed a small group of concerned citizens into a well respected organization. Thanks in large part to the collective efforts of countless volunteers, environmentally-minded individuals, and the long-term dedication and financial support of our membership, the Watershed Council has been successfully protecting our waters.

In 2014, the Watershed Council kicked off the year with a glimpse of the organization's humble beginnings and celebrated 35 years of milestones in research, awareness, and advocacy.



Our expanded **online annual report** turns the spotlight on the unique people, programs, and signs of progress that compel members to join the Watershed Council in protecting our water resources. Below are just a few highlights from 2014.

1983 Membership 141 2014 Membership 3,042 Average Membership Gift\* \$162

Staff members
10
2014 Volunteers
306

Since 1979,
our service area has
expanded to include watershed
Antrim, Charlevoix, Cheboygan,
and Emmet Counties - plus areas
of Presque Isle, Montmorency,
Otsego, Kalkaska, and
Grand Traverse Counties.

Total Grants Awarded to the Watershed Council in 2014

\$399,538

## 27 Years of Monitoring Data

Since 1987, the Watershed Council has been taking the pulse of lakes and streams throughout the Northern Lower Peninsula every three to five years. A variety of physical parameters are measured at every site including dissolved oxygen, pH, and conductivity levels. In addition, staff collect water samples that are analyzed for nutrient and chloride concentrations. In rivers, discharge (flow) is measured when conditions allow.

Our Comprehensive Water Quality Monitoring (CWQM) database now includes over 8,000 water quality measurements! These data are used regularly by the Watershed Council to assess lake and stream health, develop watershed management plans, evaluate the success of restoration projects, and much more. It is not only a resource for us, but the data are also utilized for numerous organizations, agencies, local governments, and researchers that use the data in their efforts to protect the lakes and streams we cherish in Northern Michigan.



## **Put your Pills in the POD**

In 2014, Tip of the Mitt Watershed Council embarked upon a media and education campaign to raise awareness about the Northern Michigan Prescription and Over-the-Counter Drug Drop-off (POD) Program. The POD Program is a multicounty take-back initiative that provides a convenient and environmentally sound way for residents to properly dispose of medications. The Program includes community collection events in Antrim, Charlevoix, Cheboygan, and Emmet Counties, as well as over 20 permanent collection drop boxes at law enforcement agencies throughout Northern Michigan.

The POD Program boasts eight years of implementation. However, there are still many people who are not aware of

still many people who are not aware of the program or who are not using this community service. In 2014, the POD Campaign reached out – through magazine and television ads and targeted outreach – to tell everyone to *Put Your Pills in the POD!* 

To learn more about this program, visit www.pillsinthepod.com





Over 4,500 lbs. of unwanted pharmaceuticals collected!

to attend, the unity available to wate out geted The Watershed C

Tip of the Mitt Watershed Council is committed to working on ways to avoid disasters that can degrade our inland lakes, streams, wetlands, and Great Lakes. One of the risks we face is the network of oil and gas pipelines buried beneath our feet. This is not necessarily unique to Northern Michigan, as millions of miles of pipeline crisscross the United States. However, Northern Michigan is a uniquely

vulnerable area with a wealth of pristine water resources.

**Pipeline Symposium** 

In June 2014, the Watershed Council hosted the Northern Michigan Pipeline Symposium. Over 200 people attended the event. Panelists provided valuable information on pipeline operation, regulation, oil spill response planning, and specific information about Line 5, located in Northern Michigan. The successful event brought greater attention to pipelines. It also showed how our community can work collaboratively to reduce potential risks and impacts of pipeline failures. For those unable to attend, the event was video taped and is now available to watch on our website.

The Watershed Council continues to work on prevention measures, emergency response planning, education and outreach, and pipeline policy recommendations.



protection because stormwater carries nonpoint source pollutants to our lakes, streams, and wetlands.

In 2014, the Watershed Council was awarded a grant from the Michigan Coastal Zone Management Program,

**Stormwater Matters** 

Office of the Great Lakes, Department of Environmental Quality and National Oceanic and Atmosphere (NOAA) to expand this education and outreach program.

Thanks to support from the Petoskey-Harbor Springs Area

Thanks to support from the Petoskey-Harbor Springs Area Community Foundation, Little Traverse Bay Watershed awareness signs (shown above) were installed on major roads where they intersect with the Watershed boundary. The signs bring watershed awareness to residents and visitors by welcoming them as they enter the Watershed.

## **Invasive Species Survey**

Thanks to a grant from the Michigan Department of Environmental Quality's Clean Water Fund, the Watershed Council was able to monitor the Elk River Chain of Lakes (ERCOL) for five priority invasive species: curly-leaf pondweed, Eurasian watermilfoil, invasive *Phragmites*, purple loosestrife, and quagga mussels. During 2014, monitoring was carried out in the Upper Chain from Beals Lake to Intermediate Lake. Monitoring was accomplished through benthic tows and visual surveys. In addition, detailed vegetation surveys were conducted on Hanley and Intermediate Lakes.

Following 35 benthic tows along the bottom of lakes and interconnecting waterways of the Upper Chain, not a single quagga mussel was found. Only two patches of *Phragmites* were documented after combing over 50 miles of shoreline. Not unexpectedly, purple loosestrife

was found throughout the Upper Chain, but generally in small isolated patches. No curly-leaf pondweed was documented and Eurasian watermilfoil was found in small quantities in Six Mile and St. Clair Lakes only.

Monitoring continues in 2015 in the Lower Chain from Lake Bellaire to Elk Lake, with detailed vegetation surveys scheduled for Lake Skegemog and Elk Lake.

Purple Loosestrife



**Tannery Creek Restoration** 

freat Lakes Restoration Initiative with additional support from the Michigan Department of Natural Resources, U.S. Fish and Wildlife Service, and the Petoskey-Harbor Springs Area Community Foundation. The project included removal of the existing, undersized culvert and replacement with a timber bridge. A permanent sea lamprey barrier constructed of sheet metal with a central notch for low stream flow was incorporated to prevent lamprey from migrating upstream, while allowing salmon and other spawners to pass. Michigan Native plants were incorporated into the landscape immediately around the new bridge and included grasses, shrubs, and perennials.

Throughout the construction process, we observed countless walkers, runners, and bikers slow down, pause, and even stop for a few minutes at the bridge. Many have remarked that they never knew there was a stream there, while others are thrilled to see that the creek they played in as kids has been given much-needed attention. In the future, we hope to partner with other community stakeholders to address issues upstream of the bridge, including invasive species and more undersized culverts.



#### Dear Friends,

This is my last note to you as I finish up my final board term. After six years of service, the last two as your president, I am happy to report that the organization is strong and healthy. Tip of the Mitt Watershed Council has a great staff and a truly amazing Executive Director in Gail Gruenwald.

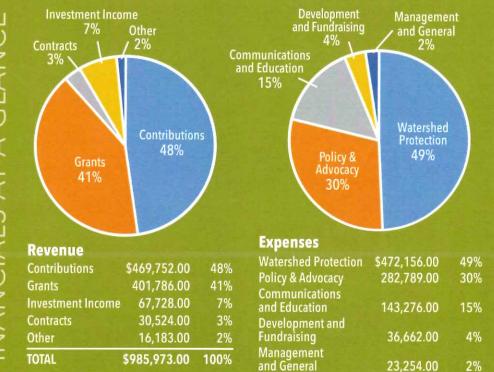


It actually takes years on the board to understand all of the things this great organization does. There are all of the basics, including policy and advocacy, grant writing, stream and lake monitoring, rain garden construction and streambank stabilization. To that we have added the Watershed Academy and many other tasks! We remain actively involved with big issues like the Enbridge Line 5 Pipeline and fracking.

I am proud of the organization for the strong science based approach used. We never advocate based on what any one of the staff wants, but rather based on where the science takes us. By remaining science based we have built a strong relationship with the Department of Natural Resources, Department of Environmental Quality, the legislature and others. We always have a seat at the table because of our reasoned approach.

We should all be delighted with our organization and its achievements. As always, thank you for your support.

Howard W. Newkirk **Board President** 



To view our audited financial statement go to www.watershedcouncil.org

TOTAL

\$958,137.00 100%

Tip of the Mitt Watershed Council 426 Bay Street

Petoskey, MI 49770

online reports.

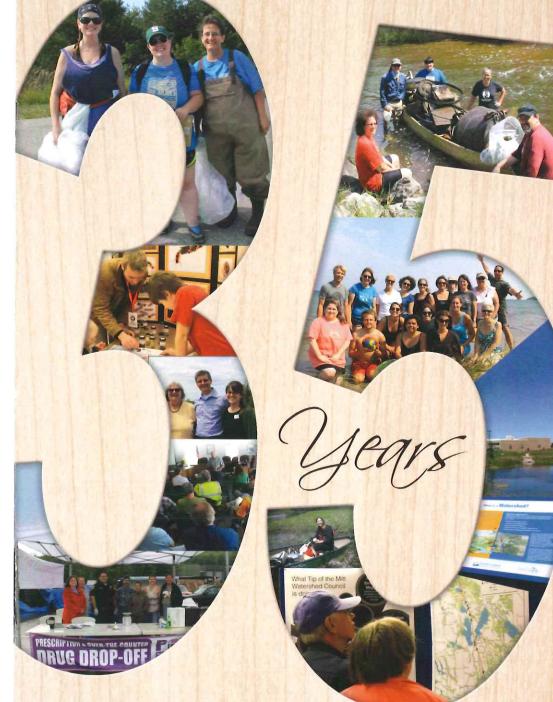
Photos from our events

Project profiles and updates

Financial information List of our Members

Visit www.watershedcouncil.org

and click on the report cover.





<ul> <li>12. Have you used the Prescription and Over-the-Counter Drug Drop-off (POD) Program in Northern Michigan? <ul> <li>Yes</li> <li>No</li> <li>No, but I will now</li> <li>I have not before and I will probably not in the future</li> </ul> </li> <li>13. If you have used the POD Program, what method of POD disposal did you use? <ul> <li>Community collection event</li> </ul> </li> </ul>	<ul> <li>17. What is the best way to get information to you about how and where to dispose of unused, unwanted, and expired medications?</li> <li> Media advertising (ex. TV, newspaper, magazines)</li> <li> Social media (ex. Facebook, Twitter, Pinterest)</li> <li> Webpage</li> <li> Brochures/handouts</li> <li> Outreach through local government/community groups (ex. Newsletters, meetings, community events)</li> <li> I'm not interested in disposing of medications</li> <li> Other (please specify)</li> </ul>			
O Permanent drop box at law enforcement office		0.2		
O Both	18. What County do you resid			
O I have not used the POD Program	<ul><li>○ Antrim</li><li>○ Charlevoix</li></ul>	O Cheboyga O Emmet	an	
	O Other (please specify)	O Emmet		
14. How much time are you willing to spend traveling to properly dis-	Other (please specify)		*	
pose of your unused, expired, or unwanted medicines?	19. What is your age?			
O 1-5 minutes	O Under 20	O 41-59		
O 5-15 minutes	O 21-40	O 60 and ov	/er	
O 15-30 minutes				
O More than 30 minutes	20. What is your gender?	O [ = ====		
<ul><li>I would not be willing to travel</li><li>Other (please specify)</li></ul>	O Male	O Female		
O Other (please specify)	Comments:			
That factors most impact your decision about how to dispose of or lanage unused medicines in your household? (Select up to 3)  Convenience/ease of disposal  Cost  Desire to avoid risk of accidental poisoning  Desire to avoid risk of drug misuse/abuse  Desire to avoid contamination of water/environment  Lack of preferable options  I don't care  Other (please specify)	YES, I would like my name to be entered into the drawing to win one of five prizes  These fields will be used solely to contact the winners of the Survey Prize Drawing. Participating in the drawing is optional; you can still give feedback without entering the drawing.  Name:  Address:  City/State/Zip Code:  Phone Number:			
16. What is your preferred method for disposal of unused, unwanted, or	Thore Number.			
expired medications (Select all that apply; answers can be the same	Email Address:			
as your current method of disposal)			200000000000000000000000000000000000000	
<ul> <li>Permanent drop box at law enforcement office</li> <li>Community collection event</li> </ul>	Thank you for taking the time to complete this survey. For more information about the POD Program, and how to properly dispose of unwanted, unused, or expired medications, please visit <a href="www.watershedcouncil.org">www.watershedcouncil.org</a> or contact Tip of the Mitt Watershed Council at 231-347-1181.			
O Return to pharmacy				
O Store in house for potential future use				
O Give to family member/friend	Waterena Council at 201 on The	2.0.		
O Throw in the trash	Special thanks to the following busine	esses that generously c	lonated prizes for the drawing!	
O Dispose of down sink/toilet	Tommy's Michigan/	BOYNE	Odawa Casino	
○ Mail back program	Walloon Village Marina	800.462.6963	1760 Lears Rd	
O I'm not interested in disposing of medications		www.BOYNE.com	Petoskey, Michigan 49770	
O Other (please specify)	Walloon Lake MI 49796 231.535.6039 (Jarrett Clark)		1-877-442-6464 www.odawacasino.com	

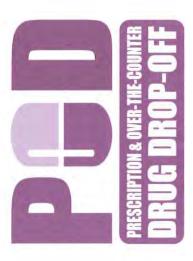
www.gettommys.com

Tip of the Mitt Watershed Council 426 Bay Street Petoskey, MI 49770

Please fold with this panel out,

tape shut and return in mail 2014 before March

surveymonkey.com s/MichiganPOD



Tip of the Mitt Watershed Council Petoskey, MI 49770 Attn: POD Survey 426 Bay Street

## Complete this survey to help us protect Northern Michigan's waters and be entered to win a prize!

Improper disposal of unused or expired medicines can pose a significant danger to our water resources, children, and community. We are gathering information on medicine disposal behavior of Northern Michigan residents to help gauge the need for increased disposal options and community education.

Your information is very important to us. By completing our survey, you will help us understand more about how medicines are stored and disposed of in our homes and communities.

This survey is being conducted by Tip of the Mitt Watershed Council as part of a grant project supported by the Community Pollution Prevention Grant Program, Michigan Department of Environmental Quality to expand the Prescription and Over-the-Counter Drug Drop-Off Program (POD Program). The POD Program is a multicounty-wide medication drug take back initiative to provide a convenient location for residents to properly dispose of prescription and over-the-counter medications and personal care products.

The entire survey will require less than 10 minutes to complete. Unless stated otherwise, please select only one answer for each question. To return, fold survey back up making sure this page and the return address page (with Attn: POD Survey) are on the outside. Tape shut, place a stamp on it, and mail it back to us. Or you can save postage and fill the survey out online at surveymonkey.com/s/Michigan POD.

By participating in the survey, you can enter into a drawing to win one of five prizes including a day pontoon rental on Walloon Lake, an hour watersports lesson for up to three people courtesy of Tommy's Michigan and Walloon Village Marina, a \$100 BOYNE Gift Card, or one of two certificates for dinner for two at the Waas-no-dé Buffet located in the Odawa Casino. To be eligible for the drawing, you must complete the survey by March 7, 2014.

We thank you for your participation and your invaluable feedback!



SAVE POSTAGE

Complete this survey online!

surveymonkey.com/s/MichiganPOD

1.	Does any person or pet in your household use medications, including either prescription or over-the counter?  O Yes  O No	7.	Recent studies have revealed that trace amounts of pharmaceuticals are present in surface, ground, and drinking water. How much do you feel this issue concerns you?  O I was not aware of this until right now, I am concerned  O I was not aware of this until right now, I am NOT concerned
2.	Do you currently have expired, leftover, or otherwise unwanted medications in your home?  O Yes O No O Not sure		<ul> <li>○ I was aware and am VERY concerned</li> <li>○ I was aware and am SOMEWHAT concerned</li> <li>○ This issue does not concern me</li> <li>○ Other (please specify)</li> </ul>
<b>3.</b>	What is the most common reason that medications usually go unused in your household?  O Medicines are expired O Change in prescription or dosage O Advised to stop using by physician or veterinarian O Experienced an adverse reaction or side effect from the medication O Decided not to continue treatment O Death O Other (please specify)	8.	In recent years, there has been an increase in home invasions and burglaries to pharmacies and veterinary offices by prescription drug seekers/abusers. How much do you feel this issue concerns you?  O I was not aware of this until right now, I am concerned O I was not aware of this until right now, I am NOT concerned O I was aware and am VERY concerned O I was aware and am SOMEWHAT concerned O This issue does not concern me O Other (please specify)
4.	What is the estimated amount of unused, unwanted, or expired medications that you have disposed of in the past 12 months?  O Less than 1 pound O 1-5 pounds O Over 5 pounds O None	9.	In recent years, prescription drug abuse has become the fastest growing drug problem in the United States. Poisoning deaths, which include drug overdoses from prescription drugs, are now the leading cause of injury death in the U.S. How much do you feel this issue concerns you?  O I was not aware of this until right now, I am concerned O I was not aware and am VERY concerned
5.	How do you currently dispose of your unused, expired, or unwanted medications? Please choose all that apply.  O Dispose of them in the sink/toilet  O Throw away in the garbage		O I was aware and am SOMEWHAT concerned O This issue does not concern me O Other (please specify)
	O Return to a Drug Enforcement Agency (DEA) National Take-Back Event O Return to a POD community collection event O Return to a POD permanent box at law enforcement offices	10.	What are your top 2 concerns regarding improper disposal of medications?  O The medications will contaminate the water supply/environment
	O Return to pharmacy O Keep them in unlocked cabinets or storage O Keep them in locked cabinets or storage O Give them to a relative/friend O I don't know how to dispose of them	-	<ul> <li>The medications will be stolen</li> <li>The medications will be ingested by children or someone other than the person who was prescribed them</li> <li>The medications will be abused by family/friend</li> <li>I have no concerns about my current disposal method</li> </ul>
6.	O Other (please specify)  How frequently do you dispose of medicines using one of the	11.	Other (please specify)  Are you aware of the Prescription and Over-the-Counter Drug
	methods mentioned above?  O Once a month or more O A few times a year O Once a year		Drop-off (POD) Program in Northern Michigan?  O Yes O No, I am not aware O No, but I would like to learn more about it

our waters.





1 Day **Pontoon Rental** 

Courtesy of Tommy's Michigan Land Walloon Village Marina



## 1 Hour Watersports Lesson

Courtesy of Tommy's Michigan and Walloon Village Marina

Complete and return this survey to be entered to win one of these great prizes!



#### **PRIZE DESCRIPTIONS**

One Free Pontoon Rental (Day)\*
Come enjoy a day out on beautiful Walloon Lake. The pontoon boat can hold 6-8 people comfortably. Bring a picnic or enjoy the new Barrel Back

Come learn how to wakeboard, waterski, or surf on Walloon Lake! Three people or less are recommended for the hour lesson. Whether you are new to watersports

Enjoy a \$100 BOYNE Gift Card good towards your choice of lift tickets, Zipline Adventures, Avalanche Bay Indoor Waterpark admission, food and beverage, retail, and more. Redeemable at Boyne Highlands Resort, Boyne Mountain Resort, The Inn at Bay Harbor, and Boyne Country Sports.

#### Dinner for two at the Waas-no-de' Buffet

Two (2) certificates for dinner for two at the Waas-no-de Buffet courtesy Odawa Casino. Each certificate has a value of \$40. Alcohol and gratuity are not included.

'Not available the week of July 4th and Labor Day Weekend.

