To reduce the opportunity for misuse when a collection for incineration is not available, prepare the drugs for disposal:



 For solid medications, such as pills or capsules: add a small amount of water to at least partially dissolve them. Seal the container with duct or other opaque tape.

 For liquid medications: add enough table salt, flour, charcoal, or nontoxic

powdered spice, such as turmeric or mustard to make a pungent, unsightly mixture that discourages



anyone from eating it. Seal the container with duct or other opaque tape to prevent leaks and breakage.

- For blister packs: wrap the blister packages containing pills in multiple layers of duct or other opaque tape.
- Unused ampules, vials, and IV bags should not be opened (other than to scratch out the patient's name). Wrap

the item with duct or other opaque tape to minimize breakage, and then place in an opaque plastic container (such as an empty yogurt or margarine tub).



Double bag the contained drugs in a closable plastic bag, or put in another container with the lid taped closed, and put it in the trash. This helps prevent immediate identification that the package contains drugs and helps contain any leaks if the container breaks during the disposal process, e.g., when plastic garbage bags tear, the trash can tips over, etc. Avoid putting drugs into any material or food that might be attractive to pets or wildlife.

Interested in finding out more information about drug use and disposal issues?

- USGS Toxic Substances Hydrology Program: http://toxics.usgs.gov/ highlights/pharmaceuticals_method. html
- EPA Pharmaceuticals and Personal Care Products as Pollutants: www.epa.gov/ ppcp
- Washtenaw County 4 minute video at www.dontflushdrugs.com
- Michigan Antibiotic Resistance Reduction: www.mi-marr.org

Contact the DEQ Environmental Assistance Center by calling (800) 662-9278 or email deqassist@michigan.gov or contact your Resource Management Division District Office with waste management questions.

The Michigan Department of Environmental Quality (DEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height,weight, genetic information or sexual orientation. Questions or concerns should be directed to the Quality of Life Human Resources, PO Box 30473, Lansing, MI 48909-7973.

A Remedy for Residential Drug Disposal







Michigan Department of Environmental Quality
Office of Environmental Assistance

A REMEDY FOR RESIDENTIAL DRUG DISPOSAL

Managing unused medications is a safety as well as an environmental concern. Traditionally, we were told to flush unwanted medications down the drain or toilet rather than keeping them around to prevent misuse by the patient for the wrong symptoms or abuse by someone else. Although effective in removing the medication from being misused, flushing creates a new and growing problem in the environment. Antibiotics and other medications in a septic system can destroy beneficial bacteria necessary for the system to operate. Wastewater treatment plants are not designed to remove many compounds found in medications and they end up being discharged into our surface and ground water. A study by the United States Geological Survey done in 1999 showed that 80% of the streams sampled contained detectable levels of compounds found in common medications. National attention is growing to develop more appropriate methods of safely disposing of unwanted medications.



NOTE: Information in this fact sheet does not apply to medications generated as waste from Michigan businesses, hospitals, clinics, medical offices, etc. Those facilities should see the guidance at www.michigan.gov/documents/deq/deq-ead-tas-univwaste_320878_7.pdf on Universal Waste.

WHAT SHOULD CITIZENS DO WITH UNWANTED MEDICATIONS?

Take your medications per the instructions of your doctor or pharmacist. If you do end up with unused medication:

- 1. Check with your pharmacy to see if they have a drug take back program. Some pharmacies are beginning to accept medications back from the public as a community service. Controlled substances (which are often prescription pain killers) can only be accepted under special collection arrangements due to federal Drug Enforcement Administration regulations. Your pharmacy can help identify controlled substances or see the "Info & Legal Resources" and "Controlled Substance Schedules" at www.deadiversion. usdoj.gov.
- 2. Find out if there is a special collection for unused and expired drugs in your area by contacting your local household hazardous waste collection coordinator and reviewing other takeback options if you do not have a locally sponsored collection. A list of local contacts is at www.michigan. gov/wasterecycling and information on other medication collections can also be found at www.disposemymeds.org, www.deadiversion.usdoj.gov, www.takebacknetwork.com. www.wmtakebackmeds.org, www.takebackmeds.org and www.greatlakescleanwater.org. Controlled substances can only be accepted under special collection arrangements due to federal regulations. Keep medications secure from misuse when storing for an upcoming collection.

Commonly collected products include:

- Prescription and over-the-counter medication including cold medicines
- Medication samples
- Vitamins
- · Medicated ointments and lotions
- Inhalers
- Veterinary medications



For sharps disposal, see the **The Point** is...Needles Hurt! brochure and the list of residential sharps collection programs at

www.michigan.gov/deqmedwaste.

3. Dispose of unwanted medicines in the trash if a collection program is not available.

DO NOT FLUSH DRUGS DOWN THE SINK OR THE TOILET!

Chemotherapy drugs may require special handling. Work with your healthcare provider for proper disposal options for this type of medication. Keep other pharmaceuticals in their original container since the labels may contain safety information, the container is chemically compatible, and the caps are typically water tight and child-proof. Scratch out, cover with tape, or use permanent marker to make personal information unreadable.