

Action Idea

Pharmaceutical Take-back Program

If flushed down the toilet or drain, unneeded or expired pharmaceuticals can contaminate water supplies. The U.S. Geological Survey conducted a study in 1999 and tested streams and aquifers for various organic chemicals and found the following compounds in samples:

- Acetaminophen
- Steroids and hormones
- Blood pressure medication
- Codeine
- Antibiotics and antimicrobials
- Ibuprofen

In addition, unwanted medications disposed of in the trash have the potential to be stolen, used, or accidentally ingested if they are not rendered unusable. Having these items around the home also presents a danger to children, animals, and guests of accidental ingestion.

Communities receive many benefits from holding a stand-alone take-back program or event for unneeded or expired pharmaceuticals, or incorporating medication into an existing household hazardous waste collection, including:

- Reduced potential for environmental impacts, such as contamination of water supplies.
- Less medication available for potential abuse or accidental ingestion.
- Prevention of inadvertent use of expired medications.

Guidelines and Suggestions

- Learn more about pharmaceuticals, their disposal, and their potential impact on water supplies and the environment. Contact your local health department or visit www.groundwater.org for more information.
- Start the planning process many months in advance to allow for adequate planning time, publicity, and local involvement.
- Have a good team together to plan and hold the event. Involve all personnel, especially pharmacists and law enforcement, in planning meetings. Event personnel should include (having at least one of each of the following at the event is suggested):
 - Pharmacist – determines if medications are controlled/non-controlled and inventories medications received. Participating pharmacists should contact the Nebraska Pharmacy Board about their participation in the take-back program.

good
water
good
health
good
choices

For more information contact your local health department or The Groundwater Foundation.



The Groundwater Foundation
P.O. Box 22558
Lincoln, NE 68516
402-434-2740 or 1-800-858-4844
www.groundwater.org

Action Idea: Pharmaceutical Take-back Program

good
water
good
health
good
choices

- Law enforcement officer – takes custody of controlled substances for destruction and provides event security. Law enforcement officers are generally willing to participate because take-back programs reduce the quantity of legal drugs available for illegal purposes. Even if you don't plan to accept controlled substances, it's still a good idea to have a law enforcement officer on hand for security purposes.
 - Data entry person – records information about medications.
 - Survey administrator – helps participants fill out surveys.
 - Other volunteers – may direct traffic, provide education and refreshments, etc.
- Contact the Drug Enforcement Agency for suggestions on how to handle disposal of controlled substances. The DEA recommends sending a letter to the agency describing the program. In turn, you should receive a letter back from the DEA confirming your program can accept controlled substances with the presence of a law enforcement officer. You can reach the DEA at 1-800-882-9539.
 - If your event will be outdoors, make sure you have a shelter available (such as a tent) for administrative duties.
 - Have recycling bins available for paper and paperboard. Many medications have outer paperboard packaging.
 - Have refreshments, handouts, free items, etc. available for participants. It's also a good idea to have a couple of volunteers on hand to answer any questions from participants about pharmaceutical disposal.
 - Consider combining the take-back event with another related event, such as a health fair.
 - Involve a local veterinarian in your event. You may have livestock or pet medication brought to your event.
 - Publicity
 - Use the terms “medications” and “pharmaceuticals” rather than “drug” in your publicity to discourage unwanted attention from potential illicit drug users.
 - It's important for the success of your event for it to be well publicized. Other event organizers have used flyers, radio advertisements, press releases, signage (posted in the vicinity of the event one to two weeks prior to the event), and others. If you're in an area where multiple languages are spoken, consider printing materials in English and other dominant languages.
 - Consider having radio advertisements the day before and/or morning of the event to help remind the public about the event.
 - Get the press to come to the event! Having the local TV station and newspaper on hand, or inviting a radio station to broadcast live from the event will boost your numbers and increase your program's visibility, particularly if you plan to have additional events in the future.

You will need several items to hold the take-back event:

- Pharmacist tool to count medications
- Tables
- Containers (such as pails or buckets) for controlled and non-controlled substances
- Laptop computer to record medication information
- Chairs
- Disposable gloves
- Recycle box for any paper or paperboard
- Markers for participants to black out patient identifying information
- Pens
- Survey forms
- Refreshments (if desired) such as coffee, water, soda, donuts, cookies, etc.

Action Idea: Pharmaceutical Take-back Program

Take-back event procedure:

- If patient identifying information has not been removed, ask the participant to black out their name with a permanent marker.
- The pharmacist(s) determines the type of medication and amount brought in and records this data, including the medication's name, dosage, and amount brought in. It's important to separate controlled and non-controlled substances. This type of data may be of interest to the insurance industry, physicians and clinicians, pharmacists, and hazardous waste disposal companies.
- The controlled substances are then handed directly to a law enforcement officer, who collects the medications in a container.¹ Non-controlled substances are placed in a separate container.
- Keep the medications in their original containers (plastic bottles, blister packs, etc.). Outer packaging, such as paperboard boxes, can be removed and recycled.
- Consider having participants fill out a survey asking why they were disposing of the medications (i.e. expired, didn't need, didn't like, death, etc.), how they heard about the event, how long they had the medications, and other pertinent information.

good
water
good
health
good
choices

Pharmacies may also take back non-controlled substances. Check with pharmacies in your area about their policies on pharmaceutical returns.

The Northeast Recycling Council (www.nerc.org) suggests managing all consumer medications as hazardous waste as a best practice for environmental protection because it is often difficult to separate the items received into hazardous and non-hazardous groups and allows for more stringent pollution prevention controls. In addition, different disposal methods are used to dispose of hazardous waste; most commonly a high temperature incinerator is used to break down the molecular bonds of the material and the ash being stored in a lined, hazardous waste landfill. To reduce costs, you may want to try to coordinate with a local hospital's or clinic's hazardous waste pickup.

Funding for take-back programs can be a challenge for some groups, but not impossible. Look to local hospitals, clinics, doctor's offices, pharmacies, utilities, environmental groups, media, and local businesses for donations. Even if they are unable to contribute funding for the event, they may be able to make other contributions, such as free advertising, refreshments, office supplies, volunteer time, or printing costs. Costs vary from event to event, depending on disposal costs, amount of medications brought in, and donations, but in general may cost anywhere from \$2000 to \$10,000.

Information on the web:

<http://www.nerc.org>

<http://www.epa.gov/wastewise>

<http://www.dea.gov>

<http://toxics.usgs.gov/pubs/FS-027-02/index.html>

¹ Controlled substances are defined by the U.S Drug Enforcement Agency based on their potential for abuse. Because of this, controlled substances cannot be accepted by anyone other than a law enforcement official and are subject to specific federal disposal regulations, including witnessed destruction. The substances are generally added to their collection of illegal drugs to incinerate. A listing of controlled substances can be found at <http://www.deadiversion.usdoj.gov/schedules/index.html>.