

Safe Disposal of Unneeded Medications

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Lesson Summary

Do you have medication that has expired, gone unused or is unwanted and are unsure of how to dispose of it? During this session, participants will learn how to dispose of medication immediately and properly.

Practicing secure medication storage and proper disposal helps prevent accidental poisoning, prescription drug abuse or drug diversion in your home and community. Taking medication as prescribed also helps you keep track of current medications. We all have a part to play in building healthier and safer communities. Do your part by storing your medication safely, then when the time comes, properly disposing of medications.

Take quiz to see if you are putting yourself or someone else at risk?

1) Are there unmarked containers in your medicine cabinet?

Yes

No

2) Have any of the medications changed color, texture or smell?

Yes

No

3) Are any of the medications in your cabinet beyond the expiration date?

Yes

No

4) Is your medicine cabinet locked?

Yes

No

If you answered yes to any of these questions then it's time to clean out your medicine cabinet! Before moving forward, let's take a few minutes to review each question and talk about how you might be putting yourself or someone in danger.

1) If you can't identify the medication, discard it! Always keep medications in their original containers so it is easily identified and not confused for something else.

- Older adults who take multiple medications may have trouble remembering to take all of their medications at the right time and in the correct dosages (1).

2) Damaged medicine may make you sick. DO NOT take medicine that has changed color, texture, or smell, even if it has not expired.

- 3) Medications lose their effectiveness after the expiration date and some may be toxic. Also, keeping expired medications creates an unnecessary health risk in the home, especially if 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 child-resistant containers (2).
- 4) In the US, a majority of unintentional poisonings are caused by accidental exposure to medicine in the home.
 - In 2007, there were 255,732 cases of improper medicine use reported to Poison Control Centers in the United States. Approximately 9% of these cases (23,783) involved accidental exposure to another person's medicine. Approximately 5,000 of these accidental exposure cases involved children 6 years and younger (3).

Guidelines for taking medication as prescribed

Medication adherence, or taking medications correctly, is generally defined as the extent to which patients take medication as prescribed by their doctors. This involves factors such as getting prescriptions filled, remembering to take medication on time, and understanding the directions. Not taking your medicine as prescribed by a doctor or instructed by a pharmacist could lead to your disease getting worse, hospitalization, even death.

- Keep a list of all medications that you take (prescribed drugs, nonprescription medicines, herbal supplements, home remedies, and medical foods)
- Make a list of any medicines that you cannot take due to allergic reactions, and share those with your doctor or pharmacist
- Tell your health care provider how you actually take your medication, especially if this is different from the originally prescribed directions.
- Learn the names of the drug products that are prescribed and given to you, as well as their dosage strength and schedules.
- Ask if there are certain foods, beverages, other medicines, or activities you should avoid while taking the drug.
- Ask for any written information available on the drug product.
- Question anything you don't understand or that doesn't seem right. Be especially alert to unexpected changes, such as receiving a prescription refill that seems to have a different strength or appearance from your original prescription.
- Show that you understand how to use your medication by repeating information about your prescription back to your doctor or pharmacist.

Tips for storing your medication properly

Commonly abused prescription medications like painkillers are highly sought after. Keep prescription medications in a safe and secure location in your home so that they cannot be taken by others.

Prescription medications should be stored in their original bottles in one of the following:

- Locked cabinet
- Hidden location
- Lock box

40%

Of teens who have misused prescription drugs report getting them out of their parents' medicine cabinets (4).

45%

Of people who used heroin were also addicted to prescription opioid painkillers (5).

#1

Drug overdose is the leading cause of injury death in the United States (6).

Handout & review the following worksheets:

- Safe Medicine Storage
- Tips on Safe Storage and Disposal of Your Prescription Medicines
- How to Properly Dispose of Your Unused Medicines

Tips for properly disposing medication

Your medicine is for you! What's safe for you may be dangerous for someone else. You can dispose of your expired, or unused medicines through a drug take back program — or at home.

Check your local paper to see if your community participates in the U.S. Drug Enforcement Administration (DEA) sponsored National Prescription Drug Take Back Day. This nationwide initiative usually takes place in April and October. Many communities also have their own permanent drug take back programs. Click [here](#) for a compiled a list of Permanent Take-Back Locations throughout Indiana.

Also check with your pharmacist to see if the pharmacy has a mail-back program or disposal kiosk for unused medicines. Should your community not participate in a drug take back program you can follow the instructions on page 9 – *Mix, Place, Throw, Scratch Out*.

STUDENT WORKSHEET 5

Safe Medicine Storage

Directions: Circle the six medicine storage errors in this picture. On the back of this sheet, describe safe storage solutions for the medicines pictured below to help make this home safer.



ANSWERS: 1. bottle of cough medicine on the counter and a teaspoon with a trace of medicine visible on spoon (should be put up and away); 2. medicine left out on the nightstand with dosage cap; 3. allergy medicine next to milk; 4. subway bag hanging low from doorknob inside closet; 5. medicine bottles inside closet; 6. open purse with multivitamin bottle sticking out of the top.

Test your knowledge of medicine safety: scholastic.com/otcmedsafety/hazards

Tips on Safe Storage and Disposal of Your Prescription Medicines

National Council on Patient Information and Education



Where do you keep your medicines? Are they in different places—with some in the medicine cabinet, some in the kitchen, and some in the bedroom or elsewhere? As a parent, grandparent, or family member, it's important that you organize and keep track of your medicines.

After all, you will want to know where a particular medicine is when you or someone else needs to find it. And you will want to keep your medicines secure so that a child, or a teenager, or even a stranger, does not get into them. That way, you can help prevent an accidental injury, as well as do your part to stop the possible abuse of prescription medicines.

The first step in getting organized is to take a look at all the medicines you have. You should try to do this type of inventory every six months, or at least once a year.

Start by checking the expiration date on the bottle—you don't want to take any chances with a medicine that no longer works the way it's supposed to. Also, look for medicines that are discolored, dried out, crumbling, or show other signs that they are past their prime. Check the expiration date for eye drops and eardrops, too. They may no longer be effective and, worse, could be a breeding ground for bacteria or fungus.

In addition, look for leftover prescription medicines from a previous illness or condition. You will want to discard these since you should never try to treat yourself (or anyone else) with a prescription medicine. Your symptoms might seem similar to what you had before, but the cause could be different or the medicine may not be the right one this time around.

Proper Disposal of Prescription Medicines

Federal Guidelines encourage consumers to:

- Take unused, unneeded, or expired prescription drugs out of their original containers and throw them in the trash.
- Mixing prescription drugs with an undesirable substance, such as used coffee grounds or kitty litter, and putting them in impermeable, non-descript containers, such as empty cans or sealable bags, will further ensure the drugs are not diverted.
- Flush prescription medications down the toilet only if the label or accompanying patient information specifically instructs doing so.
- Take advantage of community pharmaceutical take-back programs or community solid waste programs. Where these programs exist, they are a good way to dispose of unused pharmaceuticals.

Find a cool, dry area

Now that you've identified the medicines you want to keep, the next step is to find a safe place to keep them.

You'll want to store your medicine in an area that is convenient, but is also cool and dry – since heat and humidity can damage medicines. That's why a bathroom is not a good place to keep your medicines unless you are able to keep the room well ventilated. (However, the bathroom medicine chest is an ideal place to keep items such as bandages, tweezers, gauze, cotton balls, scissors, and other products that aren't affected by heat or humidity.)



Lock up your medicines

If there are children around, you might want to find an area where you can lock up your medicines. A cabinet or a drawer with a lock on it would work.

It's also an excellent idea to lock up any controlled substances that have been prescribed for you. These include medicines such as hydromorphone (Dilaudid®), oxycodone (OxyContin® and Percocet®), hydrocodone (Vicodin®), and alprazolam (Xanax®).*

The theft and abuse of prescription medicines is a serious problem. You play a big role in keeping these powerful medicines out of the hands of those who shouldn't have them. Since it is dangerous, as well as illegal, for anyone but you to use a controlled substance prescribed for you, a locked storage area can help keep a stranger or someone else from gaining access to them.

Be smart...and safe

Here are some other suggestions that can help you be smarter about storing and using your medicines.

- Keep your medicines separate from those of your spouse or other family members (for instance, on a different shelf or at least on a separate side of a shelf). This will make it less likely that you take the wrong ones by mistake.
- You may find it helpful to have a countertop or tabletop near where you keep your medicine so you can open the bottle with it resting on the flat surface. In case you drop your pill, it will land on the tabletop and not be lost down the drain or on the floor. (But be sure not to leave your medicine bottles out on the counter afterwards.)
- Good lighting near where you store your medicines will help you make sure you are taking the right medicine. Never take medicines in the dark.
- Keep the medicine in the bottle it came in. The amber color protects the medicine from light. You will also have the information right there about what the medicine is and how often to take it. The label will also have the phone number of the pharmacy so you can call when it is time for a refill.

- Never mix different medicines in the same bottle. You might end up taking the wrong one by mistake. It is also possible that some of one medicine could rub off on another and affect how well it works.
- Keep the lids on your pill bottles tightly closed. A cap can't be childproof if it's not fastened correctly.
- If there is cotton in the pill bottle when you first open it, remove the cotton and throw it away. The cotton can absorb moisture and affect the medicine that is inside.

*Dilaudid is a registered trademark of Abbott Laboratories. OxyContin is a registered trademark of Purdue Pharma, L.P. Percocet is a registered trademark of Endo Pharmaceuticals. Vicodin is a registered trademark of Abbott Laboratories. Xanax is a registered trademark of Pfizer Inc.



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HOW TO PROPERLY DISPOSE OF YOUR UNUSED MEDICINES

Unused or expired prescription medications are a public safety issue, leading to potential accidental poisoning, misuse, and overdose. Proper disposal of unused drugs saves lives and protects the environment.

Drug Disposal Guidelines

If no disposal instructions are given on the prescription drug labeling and no prescription drug take-back program is available in your area, then follow these simple steps to throw the drugs in the household trash:

1. Remove the medicine from its original container and mix it with an undesirable substance, such as used coffee grounds or kitty litter.
2. Place the mixture in a sealable bag, empty bag, or other container to prevent medicine from leaking or breaking out of a garbage bag.

Visit the Drug Enforcement Administration's (DEA) Diversion Control Division website (go.usa.gov/xNVXt) or call (800) 882-9539 for more information and to find an authorized collector in your community. The site also provides valuable information about DEA's National Take-Back Initiative.

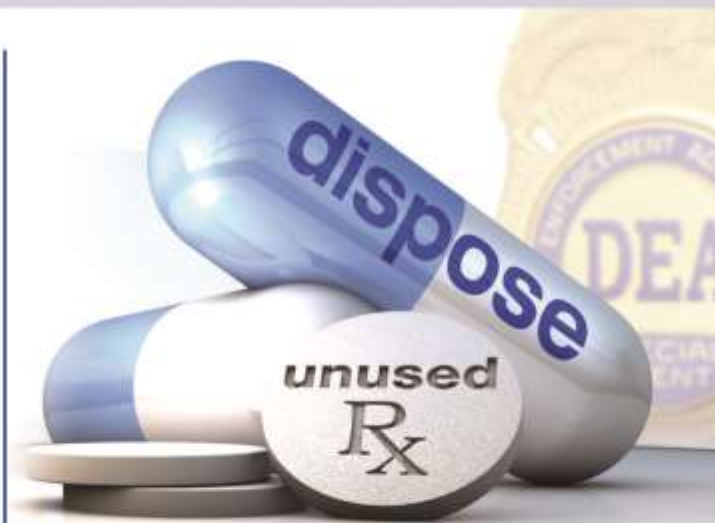
Resources

For more information on preventing prescription drug misuse, go to the following websites:

- www.dea.gov
- www.getsmartaboutdrugs.com
- www.justthinktwice.com
- www.campusdrugprevention.gov

For more information on the safe disposal of pharmaceuticals, go to the following websites:

- Environmental Protection Agency*
- How to Dispose of Medicines Properly
go.usa.gov/xNwXc
- Food and Drug Administration*
- Disposal of Unused Medicines: What You Should Know
go.usa.gov/xNw9z
 - How to Dispose of Unused Medicines
go.usa.gov/xNw9S



Additional Tips

- Scratch out all identifying information on the prescription drug to make it unreadable. This will help to protect your identity and the privacy of your personal health information.
- You must not share your prescription drugs – they were prescribed to you.

Can I Flush Medicine Down the Sink or Toilet?

If the abovementioned disposal options are not readily available, one option is to flush the medicines down the sink or toilet as soon as they are no longer needed. Some communities may prohibit this practice out of concern over the trace levels of drug residues found in rivers, lakes, and community drinking water supplies.

Do not flush medicines down the sink or toilet unless the prescription drug labeling or patient information that accompanied the medicine specifically instructs you to do so. Please also ensure you are compliant with your community's laws and regulations prior to taking such action.

Sources: Environmental Protection Agency, *How to Dispose of Medicines Properly*, 2011; Food and Drug Administration, *Disposal of Unused Medicines: What You Should Know*, 2017.

Follow these simple steps to dispose of medicines in the household trash

MIX
Mix medicines (do not crush tablets or capsules) with an unpalatable substance such as dirt, kitty litter, or used coffee grounds;

PLACE
Place the mixture in a container such as a sealed plastic bag;

THROW
Throw the container in your household trash;

SCRATCH OUT
Scratch out all personal information on the prescription label of your empty pill bottle or empty medicine packaging to make it unreadable, then dispose of the container.



Resources

- 1) "6 Ways to Help Your Older Parents Use Medications the Right Way and Prevent Problems," National Council on Patient Information and Education, 2011, <http://www.bemedwise.org/docs/must6wayshelp.pdf>.
- 2) McFee RB, Caraccio TR. "Hang Up Your Pocketbook" -- an easy intervention for the granny syndrome: grandparents as a risk factor in unintentional pediatric exposures to pharmaceuticals. J Am Osteopath Assoc. 2006;106(7):405-11.
- 3) Bronstein et al. 2007 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 25th Annual Report. Clin Toxicol (Phila). 2008;46(10):927-1057.
- 4) 2015 Partnership Attitude Tracking Survey, Partnership for Drug-Free Kids.
- 5) "Today's Heroin Epidemic," Centers for Disease Control and Prevention; <http://www.cdc.gov/vitalsigns/heroin/index.html>
- 6) Injury Prevention and Control: Data & Statistics (WISQARS) 2014, Centers for Disease Control and Prevention; <http://www.cdc.gov/injury/wisqars/fatal.html>.
- 7) <http://www.safemedication.com/safemed/MedicationTipsTools/WhatYouShouldKnow/UsingMedicationsSafely.aspx>

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