



*We are all in this together*



**Prescription Opioids and Home Safety: Proper Storage & Disposal**

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### Meet The Developers

The following Montana State University faculty and staff helped create the content of this toolkit:

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2

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### Learning Objectives

**At the conclusion of module two, participants will**

- Recognize why keeping prescription opioids in the home is an important safety topic for everyone, including the aging adult population.
- Better understand medication diversion and why it is important to properly store and dispose of unused prescription opioids.
- Learn ways to safely store medications in the home.
- Learn the different medication disposal methods available.



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**Montana's Aging Adult Populations (Past and Future)**

**Important Considerations**

- 2020:
  - ❖ In 66% of MT counties – 20-29.9% of population is 65+
  - ❖ In 11% of MT counties – 30-39.9% of population is 65+
- 2025:
  - ❖ In 66% of MT counties – 20-29.9% of population is 65+
  - ❖ In 23% of MT counties – 30-39.9% of population is 65+
- 2030:
  - ❖ In 55% of MT counties – 20-29.9% of population is 65+
  - ❖ In 38% of MT counties – 30-39.9% of population is 65+
  - ❖ In 2 counties – 40-49.9% of population is 65+

(Data from MT DOC/Census and Economic Information Center – 8/2010)

\*Keep in mind...Nationally:

- From 1999 to 2017, the greatest percentage change in drug overdose death rates occurred among adults aged 55–64, increasing from 4.2 per 100,000 in 1999 to 28.0 in 2017, a more than 6-fold increase.

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**Aging Adults and Prescription Opioids in the Home**

- People ages 45+ are prescribed not only more opioids, but higher dosages as well, increasing the likelihood of trips and falls.
- There is emerging evidence that Medicare patients have some of the highest and fastest-growing rates of opioid use disorder.
- The elderly are less likely to recognize signs of overdose.
- Aging populations metabolize medications differently, thus have a higher likelihood of overdose.
- The elderly are more likely to take more than 1 prescription = drug interactions

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**Aging Adults and Prescription Opioids in the Home**

- More grandparents are raising grandchildren than ever before. This family dynamic:
  - Increases the likelihood of elder abuse as many aging individuals are raising grandchildren due to the opioid problem.
  - Increases the hazards associated with accidental poisonings among children.

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**Why do we care?**

Since 2000, more than 700 Montanans have died from prescription opioid overdoses.

299 of those deaths were people aged 45+ (42.7%).

How does this affect how we help address keeping our homes and families safe?



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**Prescription Drug Diversion**

When not stored properly, prescription drug diversion can happen.

- **Prescription drug diversion:** the deflection of prescription drugs from medical sources into the illegal market. This includes transferring prescription drugs to people they were not prescribed for.
  - It's against the law to divert drugs—you can go to jail for it.
  - According the 2019 MT Office of Public Instruction, Youth Risk Behavior Survey, over 1 in 10 high school students has taken a prescription drug without a doctor's prescription.

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**Safe Storage = A Safe Home**

- In 2018, Montana providers wrote 54 opioid prescriptions for every 100 persons. With a population of 1,053,862 (Census, 2017) residents, 569,085 opioid prescriptions were in circulation.

**To prevent drug diversion and accidental overdose from happening:**

- Hide and lock up prescription opioids where family, friends, or guests cannot find them.
- Keep medications in original container. Remove/black-out your name and prescription number to protect your identity before disposing it.
- Always keep your medications locked up and stored away, out of reach of children or pets.

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9

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### Safe Storage – Out of Sight



Safe Medication Storage Zone – **Out of Sight**, out of reach!

Are medications safely stored in areas that are inaccessible to children?

Medications should be not only out of reach, but also **out of sight!**

Securely storing medications is as important as securely storing a gun in your home!

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10

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### Safe Medication Storage –Locking Cases

Locking medicine cases are available for purchase on-line and at most major big box stores. Costs average around \$25.



Make every effort to store these lock boxes out of reach and most importantly, **out of sight.**

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11

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### Safe Medication Disposal –Methods

**1<sup>st</sup> Choice:** Utilize local medication take-back community events.

**2<sup>nd</sup> Choice:** Utilize medication drop-boxes located in your community.

**3<sup>rd</sup> Choice:** Utilize a Deterra® or other medication neutralization pouch.

**4<sup>th</sup> Choice:** Utilize household disposal using coffee grounds/kitty litter, etc.

**5<sup>th</sup> Choice:** Flush medications if directed to do so on the label. Does not apply to septic systems.

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12

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### Prescription Medication Take Back Events

Encourage participation in community events such as National Take-Back Day.

In Montana, the 2019 event:

- Collected 1,720 lbs. of medication
- Consisted of 26 collection sites

Click here to locate the next Take Back Day in your area.  
<https://takebackday.dea.gov/>




13

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### Prescription Medication Drop Boxes




Disposing of unused medications in a secure collection box is the preferred method for safely disposing of household medications.

These collection boxes are available at permanent collection receptacles that reside at law enforcement offices, pharmacies, or other secure locations.

As of August 2019, there were 164 drop-boxes in MT:

- 50 = police departments or sheriff's offices
- 76 = pharmacies
- 38 = health clinics or hospitals.

For specific locations, visit  
<https://dphhs.mt.gov/amdd/substanceabuse/dropboxlocations>



14

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### The Following Items CAN Be Disposed of in a Medication Drop Box

- Prescription Medications
- Pet Medications
- Over-the-Counter Medications
- Prescription Ointments
- Prescription Patches
- Vitamins



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**The Following Items CAN NOT Be Disposed of in Medication Drop Boxes**

- Needles and Syringes  
For Safe Needle and Syringe disposal go to: <http://safeneedledisposal.org/>
- Thermometers
- Hydrogen Peroxide
- Inhalers
- Lotions and Liquids
- Aerosol Cans

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16

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**Another Safe Disposal Option— Medication Deactivation Pouches**

Single-use medication deactivation pouches:

- Contain a substance that neutralizes prescription medications, rendering it safe to dispose of in household garbage.
- Allows for quick and easy medication disposal.

*\* Ideal for those who cannot travel to medication drop box locations.*



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17

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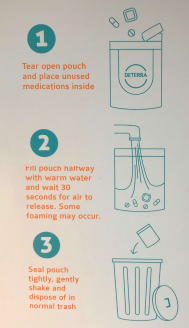
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**Another Safe Disposal Option— Medication Deactivation Pouches**



<https://youtu.be/ISBwBqTk2c>

**Small bags:** Each small stand-up pouch can deactivate:  
 Pills / Films: 15 OR  
 Patches: 2 OR  
 Liquids / Creams: 2 oz / 60 mL

**Medium bags:** Each medium stand-up pouch can deactivate:  
 Pills / Films: 45 OR  
 Patches: 6 OR  
 Liquids / Creams: 6 oz / 180 mL

**Large bags:** Each large stand-up pouch can deactivate:  
 Pills / Films: 90 OR  
 Patches: 12 OR  
 Liquids / Creams: 12 oz / 360 mL

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18

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### Safe Disposal – Household Trash

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.

If a community drop-box is unavailable, medicines can be mixed with an undesirable substance such as coffee grounds or kitty litter in a sealed plastic bag and disposed of in household trash.

19

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### Why Can't I Flush My Medications?

- Flushing prescription opioids is only recommended when no other disposal options are available.
- Remember that the type of plumbing (septic systems) plays a role in the flushability of medicines.
- Check the **FDA flush list** to see if a medication can be flushed: <https://www.fda.gov/drugs/disposal-unused-medicines-what-you-should-know/drug-disposal-fdas-flush-list-certain-medicines>

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### Safe Medication Disposal - Flushing

#### Septic Systems

Septic systems are used in many rural areas of Montana.

IF on a septic system, it is recommended that ALL prescription medications are disposed of via the household garbage.

✓ OTC meds are ok to flush on a septic system

\*Flushing fentanyl patches is never recommended.

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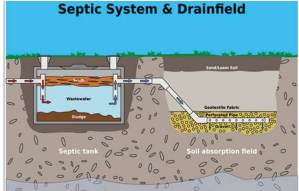
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## Safe Medication Disposal - Flushing

### Septic Systems



**Septic System & Drainfield**

- Even expired prescription medications should never enter a septic system.
- **Pharmaceuticals vs. Over the Counter Medications** – OTC medications are ok to flush on septic systems; prescription medications (antibiotics, anti-depressants, cancer-related drugs, or painkillers) **are not!**
- Rx meds can harm the septic system:
  - Potential to clog the system
  - Can harm the biological processes needed for proper septic system functioning (just using the bathroom while taking pharmaceuticals can be a problem)
  - Medications, like antibiotics, can kill off the healthy microbes that you need in your septic system. (Bacteria and enzymes aid in filtering the wastewater from your house.)

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22

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## Safe Medication Disposal - Flushable Medications

List of medicines recommended for disposal by flushing

This list from the U.S. Food and Drug Administration (FDA) tells you which medicines you should flush when they are no longer needed. Links in the list below direct you to medicine information for consumers that includes specific disposal instructions.

List of medicines recommended for disposal by flushing.

Type: `drugs@fda` into your browser, or search: `drugs@fda` on your tablet or phone, and the current list of flushable medications will appear.

Active Ingredient	Found in Brand Names
Zalcitabine	Zalcitab
Zidovudine	Retrovir, Rumeval, Ruzdano, Subvira, Zidovir, Zidovir, Zidovir
Zinc	Abstral, Actis, Duranex, Fexora, Oxyala
Diuretics	Clasral/Clasral Ac/Dial rectal gel
Hydrocodone	Amevix, Zonalis ER, Lortab, Norco, Roxipren, Vicodin, Vicodin ES, Zonalis ER
Hydroxyzine	Hydroxyzine
Meperidine	Demoral
Methadone	Dosiprina, Methadone
Methylphenidate	Daytrana transdermal patch system
Morphine	Avonia ER, Endolva, Indinor, Morphabond ER, MS Contin, Avonia
Oxycodone	Combunox, Oxyale (Formerly Oxyrel), Oxycodone, Percocet, Percodan, Roxicet, Roxipren, Rombamid, Tarama ER, Xartem 30, Xartem ER
Oxycodone	Oxycodone
Tapentadol	Nuvalet, Nuvalet ER
Sodium Oxibutate	Xybon oral solution

FDA believes that the known risk of harm, including death, to humans from accidental exposure to the medicines listed above, especially potent opioid medicines, far outweighs any potential risk to humans or the environment from flushing these medicines. FDA will continue to conduct risk assessments as a part of our larger activities related to the safe use of medicines.

For disposal information, specific to another medication you are taking please visit <https://www.fda.gov/oc/ohrt>. Once there type in the medication name and click on search. Then click on the label section for that specific medication. Select the most recent label and search for the term "disposal."

Updated: April 2018

MONTANA EXTENSION

23

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## Safe Medication Disposal - Flushing



Some pharmacies will place a label on prescriptions indicating whether the medicine is flushable or not.

Check your prescriptions for these labels before flushing medications down the drain.

Do not flush unused medications or pour down a sink or drain.

**DO NOT FLUSH UNUSED MEDS OR POUR DOWN SINK**

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24

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### Safe Medication Disposal -Flushing

#### Fentanyl Patches

Municipal system only (not applicable to septic systems):

- FDA recommends: Fold patch in ¼, sticky sides together, flush down the toilet.
- Don't dispose in household trash where kids and pets can find it. (Also, think about sanitation workers and others who may come into contact with it.)
- FDA recognizes there are environmental concerns about flushing medicines down the toilet, however, believes the risk associated with accidental exposure outweighs any potential risk associated with disposal by flushing.



MONTANA EXTENSION

25

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### Safe Medication Disposal – Quick Tips

- Quick Link and Printable Fact Sheet for Prescription Drugs/Medication: Proper Use, Storage and Disposal in Montana:  
<https://dphhs.mt.gov/Portals/85/publichealth/documents/EMST/opioids/MedicationProperUseStorageDisposal.pdf>
- Unused or expired medications have the potential to be misused or stolen.
- Medications that are flushed down the sink or toilet may contaminate local water sources.
- Some medications, like fentanyl patches, should not be flushed if utilizing a septic system.

MONTANA EXTENSION

26

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### Safe Medication Disposal - In Conclusion

- Prescription opioids need to be securely locked up and out of reach AND sight!
- Taking the time and effort to ensure that opioid-based medications are properly stored/disposed of can:
  - Prevent accidental overdoses in children
  - Prevent diversion of medications by friends, family, or even acquaintances.

MONTANA EXTENSION

27

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**Conclusion**

Please visit our website:  
[http://health.msuextension.org/opioid\\_misuse.html](http://health.msuextension.org/opioid_misuse.html)

- Access to all five modules and PowerPoints
- Access to the Native American Toolkit
- Access to informational and recovery story videos
- Print/download educational resources
- Order a medication disposal pouch (while supplies last)

If you have any questions, please email our program director Barbara Allen  
[biallen@montana.edu](mailto:biallen@montana.edu)

Montana Department of Health and Human Services website:  
<https://dphhs.mt.gov/opioid/>



28

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**References**

Aging Adults and Prescription Opioids in the Home. Montana State University Extension, Kinship Navigator Program, 2020. Available at <https://msuextension.org/mknng/index.html>


Montana's Aging Adult Populations. (2010, August). Data from the Montana Department of Commerce – Census and Economics Information Center. <https://ceic.mt.gov/>

Montana's Aging Adult Populations. Hedegaard H, Miniño AM, Warner M. Drug overdose deaths in the United States, 1999–2017. NCHS Data Brief, no 329. Hyattsville, MD: National Center for Health Statistics. 2018. Retrieved August 18, 2021, from <https://www.cdc.gov/nchs/products/databriefs/db329.htm>

Prescription Drug Diversion. 2019 Montana Youth Risk Behavior Survey High School Results. Retrieved August 18, 2021, from [https://opi.mt.gov/Portals/182/Page%20Files/YRBS/2019YRBS/2019\\_MT\\_YRBS\\_FullReport.pdf?ver=2019-08-23-083248-820](https://opi.mt.gov/Portals/182/Page%20Files/YRBS/2019YRBS/2019_MT_YRBS_FullReport.pdf?ver=2019-08-23-083248-820)

Prescription Medication Drop Boxes. Montana Department of Justice, 2019, from <https://dojmt.gov/consumer/prescriptiondrugabuse/rx-dropbox-locations/>

Prescription Medication Take Back Events. Montana Department of Justice, 2020, from <https://www.justice.gov/usao-mt/pr/dea-taking-back-unused-prescription-drugs-oct-24-2020>



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**References**

Prescription Medication Take Back Events. United States Drug Enforcement Administration, from <https://www.dea.gov/press-releases/2019/11/04/over-six-tons-prescription-drugs-and-vaping-devices-collected-dea-take>


Safe Storage = A Safe Home. United States Census Bureau: Quick facts Montana. Retrieved from <https://www.census.gov/quickfacts/MT>

Why do we care? Montana Department of Public Health and Human Services, 2019. Addressing Substance Use Disorder in Montana, Strategic Plan: Interim Draft Report. Retrieved from <https://dphhs.mt.gov/Portals/85/Documents/AddressingSubstanceUseDisorderInMontana.pdf>

Why do we care? NIDA. 2020, April 3. Montana: Opioid-Involved Deaths and Related Harms. Retrieved February 10, 2021, from <https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/montana-opioid-involved-deaths-related-harms>

Why do we care? NIDA. 2020, April 3. Montana: Opioid-Involved Deaths and Related Harms. Retrieved August 18, 2021, from <https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/montana-opioid-involved-deaths-related-harms>

Why do we care? Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2020. Available at <http://wonder.cdc.gov>



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