

Safe Disposal of Fentanyl Transdermal Patches

Issue

A substantial amount of fentanyl remains in a transdermal patch even after use, creating a risk for **abuse, misuse, diversion, and accidental exposure**. Because fentanyl is an extremely potent opioid with multiple **boxed warnings**, accidental exposure or ingestion can result in serious injury or death. To prevent diversion and accidental exposure, facilities must dispose of fentanyl patches using a method which renders any remaining drug inaccessible and non-retrievable.

Regulatory Considerations

CMS State Operations Manual (SOM), **42 CFR §483.45 (Pharmacy Services)**, requires that “disposal methods for controlled medications must involve a secure and safe method to prevent diversion and/or accidental exposure.”

Relevant F-tags include:

- **F755 (Pharmacy Services)** – “Records of personnel access, usage, and disposition of all controlled medications with sufficient detail to allow reconciliation (e.g., the Medication Administration Record (MAR), proof-of-use sheets, or declining inventory sheets), including destruction, wastage, return to the pharmacy/manufacturer, or disposal in accordance with applicable State requirements.”
- **F761 (Labeling & Storage of Drugs and Biologicals)** – “Pharmacy policies at a minimum, address safeguarding and access, monitoring, administration, documentation, reconciliation and destruction of controlled substances.”

PharMerica’s Consultant Pharmacists are available to assist facilities in evaluating policies and procedures related to medication reconciliation and destruction, to support compliance with all applicable state and federal laws and regulations, and help minimize the risk of accidental exposure and intentional diversion.

Acceptable Disposal Methods

The Food and Drug Administration (FDA) and manufacturer instructions recommend disposing of used fentanyl patches by folding the patch in half with the adhesive (sticky) sides together, then flushing the folded patch down the toilet. However, some state or local laws restrict medication flushing. Facilities should review applicable regulations and use an appropriate alternative disposal product or system, when necessary, provided the facility can show that the method minimizes accidental exposure or diversion.

Unacceptable Disposal Methods

Disposal in resident room or common area trash cans or sharps containers DO NOT adequately prevent accidental exposure or diversion. Concerns regarding improper fentanyl patch disposal and potential accidental exposure may be investigated under **F689 (Free of Accidents)**.

FDA Flush List

The FDA Flush List identifies medications that pose a significant risk of serious harm or death from a single accidental exposure. Fentanyl-containing products are included because of their potency and high risk of misuse and overdose. Facilities should review the list when developing medication disposal policies.

Example Products on the FDA Flush List

Active Ingredient	Found in Brand Names...
Buprenorphine	Belbuca, Butrans, Suboxone, Subutex, Zubsolv
Diazepam (rectal gel)	Diastat, Diastat Acudial
Fentanyl	Duragesic
Hydrocodone	Hysingla ER, Norco, Reprexain, Vicodin, Vicoprofen
Hydromorphone	Exalgo
Meperidine	Demerol
Methadone	Dolophine, Methadose
Methylphenidate (transdermal system)	Daytrana
Morphine	Avinza, Kadian, MS Contin
Oxycodone	Oxaydo, Oxycet, OxyContin, Percocet, Roxicet, Roxicodone, RoxyBond, Xtampza ER
Oxymorphone	Opana, Opana ER
Sodium Oxybate	Xyrem, Xywav
Tapentadol	Nucynta, Nucynta ER

Resource Conservation and Recovery Act (RCRA)

On August 21, 2019, the U.S. Environmental Protection Agency (EPA) Hazardous Waste Pharmaceuticals Final Rule established a **"sewer ban"** that prohibits healthcare facilities from flushing hazardous waste pharmaceuticals into sinks, drains, or toilets. Although fentanyl patches are not classified as RCRA hazardous waste pharmaceuticals, facilities should always verify federal, state, and local requirements before flushing any medication.

Best Practices

- ✓ Ensure pharmaceutical waste disposal methods are consistent with applicable federal and state requirements, local ordinances, and accepted standards of practice.
- ✓ Employ appropriate drug disposal systems that demonstrate the ability to prevent accidental exposure and intentional diversion.
- ✓ Adopt diversion prevention strategies, such as witnessed disposal and attestation by ≥ 2 appropriately titled professionals, when required by state regulations or facility policy.
- ✓ Maintain a controlled medication disposition log, or equivalent documentation, in accordance with federal and state recordkeeping requirements.
- ✓ Leverage pharmacist expertise to support controlled substance record keeping, reconciliation, and regulatory compliance.

References

1. U.S. Food and Drug Administration. *Drug Disposal: FDA's Flush List for Certain Medicines*. FDA. Updated March 2024. <https://www.fda.gov/drugs/disposal-unused-medicines-what-you-should-know/drug-disposal-fdas-flush-list-certain-medicines>.
2. *Fentanyl transdermal system [prescribing information]*. Webster Groves, MO: SpecGX LLC; January 2026.
3. Khan U, Bloom RA, Nicell JA, Laurenson JP. Risks associated with the environmental release of pharmaceuticals on the U.S. Food and Drug Administration "flush list". *Sci Total Environ*. 2017 Dec 31;609:1023-1040. doi: 10.1016/j.scitotenv.2017.05.269.
4. U.S. Environmental Protection Agency. *EPA's Ban on Sewering Pharmaceuticals: Introductory Fact Sheet*. April 2022. https://www.epa.gov/system/files/documents/2022-05/GA%20Sewer%20Ban%20Fact%20Sheet_final.pdf.