In-Home Drug Disposal Products: Data Gaps and Misleading Claims

Overview of the Issue

U.S. residents need safe, convenient, and affordable medication disposal options to remove drugs from their homes. Drug take-back programs at pharmacy and law enforcement locations are the preferred method to help combat the national drug abuse epidemic, avoid accidental poisonings, and prevent environmental contamination. In fact, the vast majority of federal, state, and local government agencies support drug take-back programs – collection receptacles, events, and mail-back envelopes – as the safest drug disposal practice.

As the need for drug disposal solutions has grown, a new class of products has emerged: **in-home disposal "pouches" or "bottles" of proprietary ingredients that claim to alter pharmaceuticals to render them safe to trash.** However, the companies marketing them do not provide scientific evidence that the products are safe or effective, and make misleading claims of government approval. **The U.S. Drug Enforcement Administration and the Environmental Protection Agency do not have performance standards for their use, and have not reviewed or approved these products.**

Why shouldn't we rely on these products to dispose of leftover household medications?

- There is a lack of transparent data on ingredients and function/mode of action (i.e., no proof they work).
- There is a lack of independent/peer-reviewed data regarding capacity determination, full temporal effects on potency, and stages of recoverability.
- Consumers may be exposed to a potentially dangerous mix of drugs and chemicals if product instructions are not strictly followed and a pouch or bottle is over-filled or spilled.
- The products are not intended to handle large quantities of drugs and may not be effective on drug mixtures.
- The alteration process may produce unassessed— potentially toxic— bi-products.
- These products create packaging waste.
- These products may not be legal to use for disposal of home-generated drug waste where state or local regulations prohibit trash disposal or the used product exceeds trash disposal limits.
- Most states regulate pharmaceutical waste from a clinic, hospital, pharmacy or long-term care facility as medical waste and may prohibit trash disposal after mixing.
- Disposal using these products is expensive relative to using a drug take-back program (cost estimate of $50-60— up $140— per pound of drug processed, vs. take-back receptacles which cost $2-5 per pound).

Conclusion

Promoting these in-home drug disposal products sends the message that they are as safe and effective as using a drug take-back program. Trash disposal should be viewed as a last resort, so until manufacturers of these products provide complete, independently reviewed evidence of their effectiveness, consumers should be warned about potential safety and efficacy concerns. PSI's clear and concise message to the public positions drug take-back as the best option, and in-home disposal as a last resort, is critical to help combat the national drug abuse epidemic, prevent accidental poisonings, and protect the environment.

Additional Resources

- Product Stewardship Institute— Pharmaceuticals
- "Overview of Eight Medicine Disposal Products," April 2017, prepared by Community Environmental Health Strategies LLC for the San Francisco Department of the Environment

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