

# Self-imposed use cessation dates tied to ophthalmic drop waste

July 16 2024, by Lori Solomon

---



Self-imposed use cessation dates (SUCD) for multiuse eye drop bottles leads to significant drug waste and associated costs, according to a report [published](#) online July 1 in *Ophthalmology*.

John M. Tan, from the Icahn School of Medicine at Mount Sinai in New York City, and colleagues quantified the [volume](#) of drugs discarded in ambulatory clinic settings due to SUCD (discarded after 14 or 28 days) for multidose ophthalmic drops. Bottles slated for disposal at three 14-day intervals from three hospital-based ophthalmology clinics were analyzed for remaining volumes.

The researchers found that over six weeks, 297 bottles were discarded, with an average of 71.9% of the total volume of medication remaining in each bottle at the time it was discarded. The average time was 494 days between SUCDs and U.S. Food and Drug Administration-regulated expiration dates (FREDs; median, 533). Given the rate of usage, an estimated 91% of the discarded bottles would be fully depleted before expiration if FREDs were followed.

An estimated 724,719 drops would be wasted over the year, translating to 188,647 encounters for proparacaine; 98,567 encounters for tropicamide; and 42,866 for phenylephrine. This yielded an extrapolated actual annual cost for eye drops of approximately \$111,527.

"We are currently working with the Health System to consider using FDA-regulated expiration dates as the discard dates for our drops and have also instituted measures to reduce the number of [bottles](#) that are opened and ultimately wasted," co-author Gareth Lema, M.D., Ph.D., also of the Icahn School of Medicine at Mount Sinai, said in a statement.

**More information:** John M. Tan et al, Ophthalmic drop waste due to self-imposed use cessation dates, *Ophthalmology* (2024). [DOI: 10.1016/j.optha.2024.06.020](https://doi.org/10.1016/j.optha.2024.06.020)

© 2024 [HealthDay](#). All rights reserved.

Citation: Self-imposed use cessation dates tied to ophthalmic drop waste (2024, July 16)  
retrieved 16 July 2024 from <https://medicalxpress.com/news/2024-07-imposed-cessation-dates-ophthalmic.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.