



Mott Poll Report

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Parent Actions around Expired and Leftover Medicine in the Home

Over-the-counter (OTC) medicine, purchased at a drugstore or other retailer, and medicine prescribed by a doctor are found in many family homes. The C.S. Mott Children's Hospital National Poll on Children's Health asked a national sample of parents of children 0-18 about the storage and disposal of expired and leftover medicine.

Nearly all parents have adult strength (90%) and/or children's strength (70%) OTC medicine in their home. Most parents (79%) say they always or usually check the expiration date when giving their child an OTC medicine. Less than half of parents believe that OTC medicines are not as effective (44%) when past their expiration date, and 22% say expired OTC medicines are unsafe. While 37% of parents believe it would never be okay to give their child expired OTC medicine, some parents think it is okay to give expired medicine past the expiration date by one month (20%), three months (14%), six months (14%), or one year or more (15%).

Nearly half of parents (46%) report having leftover prescription medicine at home from an adult's (40%) and/or child's (23%) prescription. Most parents (62%) say they are more careful about disposing leftover prescription medicine than OTC medicine.

Parents believe it is important to properly dispose of expired or leftover medicine to prevent children from getting into the medicine (78%), to protect the environment (70%), and to prevent someone from taking expired medicine (58%). However, parents struggle with knowing how to dispose of medicine; 73% say they do not know which medicines should be mixed in with coffee grounds or kitty litter before disposing and 40% do not know which medicines should not be flushed down the toilet.

Among the 82% of parents who say they have disposed of expired or leftover medicine in the past five years, the most common method of disposal is throwing the medicine in the trash (66%); 16% say they flushed medicine down the toilet or sink. Nearly 1 in 3 parents (30%) say they have deposited expired or leftover medicine in a drop box at a pharmacy, hospital or doctor's office. Fourteen percent of parents have brought medicine to a drug take-back event in their community, while 47% had not heard about this type of event. Other reasons for not participating in a drug take-back event were that it was unnecessary for most medicines (24%), it was too much hassle (17%), or the time or location was inconvenient (15%).

How far past the expiration date?

% of parents who say OTC medicine is OK to give to kids past expiration date



Never	37%
1 month	20%
3 months	14%
6 months	14%
1 year or more	15%

Source: C.S. Mott Children's Hospital
National Poll on Children's Health, 2022

Report Highlights

Nearly half of parents have leftover prescription medicine at home.

Only 1 in 5 parents think it is unsafe to take medicine past the expiration date.

1 in 7 parents have flushed expired or leftover medicine down the toilet or sink.

Data Source & Methods

This report presents findings from a nationally representative household survey conducted exclusively by Ipsos Public Affairs, LLC (Ipsos) for C.S. Mott Children's Hospital. The survey was administered in August-September 2022 to a randomly selected, stratified group of adults who were parents of at least one child age 0-18 years living in their household (n=2,023). Adults were selected from Ipsos's web-enabled KnowledgePanel® that closely resembles the U.S. population. The sample was subsequently weighted to reflect population figures from the Census Bureau. The survey completion rate was 61% among panel members contacted to participate. The margin of error for results presented in this report is ±1 to 3 percentage points.

A publication from C.S. Mott Children's Hospital, the University of Michigan Department of Pediatrics, and the Susan B. Meister Child Health Evaluation and Research (CHEAR) Center.

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C.S. Mott Children's Hospital National Poll on Children's Health

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Implications

This Mott Poll addresses an important parent responsibility: disposing of expired and unused medication. Keeping medicines after they are expired or no longer needed creates an unnecessary health risk for children. Younger children getting into medicine in the home is a major source of unintentional pediatric poisonings. For older children, the issue is diversion of medicines for experimentation or intentional misuse.

Nearly all parents reported having OTC medicine in their home, and it is not uncommon for OTC medicine to reach its expiration date with doses remaining. When the expired medicine is discovered, parents must choose whether to use the medicine past its expiration date or to discard it. Less than half of parents in this Mott Poll agreed that OTC medicines are not as effective when past their expiration date and only one-quarter believe taking expired medicine is unsafe. To some extent, this thinking is in line with the how expiration dates are determined. Based on product testing, expiration dates represent the date at which the manufacturer can still guarantee the medicine's full effectiveness and safety. Many parents may base their decision on the amount of time past the expiration date.

In many cases, parents do not realize a medicine is expired until they reach for medicine to help their child's symptoms. And for many parents this may happen at bedtime or early in the morning when it is inconvenient to go out and purchase new medicine. The inconvenience adds another layer to the decision about whether to give their child a dose of expired medicine. Medicines lose their effectiveness over time, so it is reasonable for parents to base their decision on how far past the expiration date. A strategy to avoid this situation is to check expiration dates for their child's OTC medicines twice a year, particularly before allergy and/or flu season.

Nearly half of parents in this Mott Poll had leftover prescription medicine in their home, including from their child's prescription. For example, this may occur because parents discontinue giving doses of antibiotics earlier than prescribed, which creates a risk that treatment for an infection will be inadequate. It is important that parents understand and follow directions from their child's doctor and/or pharmacist regarding prescription medicine. Parents might ask if there is likely to be leftover medicine, so they know what to expect.

Parents should store OTC and prescription medicine in its original packaging, to make sure they have access to dosing and expiration information. Medicine should be stored in a cool, dry place, avoiding humid locations such as a bathroom cabinet, and out of reach of younger children. Parents of older children should lock or at least monitor certain medication that can be misused, including pain medication and sleep medication.

When parents decide to dispose of expired or leftover medicine, the safest choice is to drop off the medicine at a permanent collection site or a periodic take-back event. Parents in this Mott Poll reported using collection sites at their local hospital, pharmacy or doctor's office; some pharmacies also have mail-back options. In addition, many communities host take-back events once or twice a year in conjunction with the US Drug Enforcement Administration's National Drug Take Back Day.

If parents are unable or unwilling to return expired or leftover medicine to a collection site, a secondary option is to dispose of the medicine in the household trash. Experts recommend putting the medicine into a plastic bag, dissolving it with water and adding kitty litter, coffee grounds or other material that will mix with the medicine and make it unappealing for children or pets to eat. Sealing the bag will prevent the medicine from leaking. Generally, parents should avoid flushing expired or unused medicine down the toilet or sink, which may result in medicine getting in the water supply which exposes residents to chemicals in drinking water.