

Poison Centers Received One Call Every 44 Minutes for This

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February 07, 2024

STORY AT-A-GLANCE

- › Data show that despite a public awareness campaign after the Tide Pods Challenge, children, adolescents and adults continue to be poisoned by liquid laundry detergent packets. The most common age group affected is children less than 6 years, but annual exposure rates in adults and adolescents rose dramatically from 2014 to 2022
- › Liquid laundry detergent packets are more toxic than traditional liquid or powder. Reformulating the product may reduce toxicity, but this has not happened since their release in 2012. Manufacturers are allowed voluntary safety standards that do not conform to the 1970 Poison Prevention Packaging Act (PPPA), which has been highly effective in preventing unintentional poisoning
- › Within one year of release, Tide Pods sales rose to \$550 million, which garnered the company 75% of the single-dose laundry packet market. There are dire consequences for anyone who consumes them as the pH is typically much higher or lower than human tissue, destroying all tissue it touches
- › Laundry detergents are also packed with "fragrance," the ingredient list of which is protected by the FDA as a "trade secret." You can reduce your risk by using simple recipes to make your own laundry detergent or cleaning supplies, and add essential oil for fragrance

There are 55 poison control centers located across the U.S.¹ Each day trained experts are connected to the public and professionals who are seeking help or treatment advice. The poison control centers collect this data in real-time, which was the basis of a study

from the Abigail Wexner Research Institute in which they analyzed the number, severity and rate of exposure to children, teens and adults to liquid laundry detergent packets.²

Since 1946,³ Tide laundry detergent, manufactured by Procter & Gamble (P&G), has been a part of American culture. Tide introduced the first heavy-duty liquid laundry detergent in 1946 and the formula did not change again until 1968 when enzymes were added to help break down stains.

By 1970, color-safe oxygen bleach was added to the formula to whiten and brighten your clothes. CNN reports⁴ that in 2004, P&G was looking for a new hit in the consumer market. It had been decades since Tide introduced liquid detergent and cheaper products were encroaching on the brand's market. The company's next goal was to disrupt "sleepwashing," a term they used to describe consumers who picked up any bottle of detergent on the shelves.

After eight years of trial and error, P&G introduced Tide Pods and it quickly became a breakthrough success. The small, easily transported pods meant consumers didn't have to lug around bulky detergent bottles and didn't have to clean up after spills. But consequences quickly followed. The study investigators identified increases and declines in exposures to children, teens and adults.⁵

Number of Poisons From Liquid Laundry Detergent Packets Rising

In a study published in *Clinical Toxicology*, researchers looked at the number of calls related to liquid laundry detergent packets since the 2010s.⁶ They sought to assess the longitudinal trends in exposure by age, and found poison control centers had recorded 114,826 exposures to single or polysubstance liquid laundry detergent packets from 2014 to 2022.

While the number of calls on children under age 6 increased yearly at first, they declined over the years 2020 to 2022. Researchers attribute this to both public awareness and voluntary product safety changes made by the detergent companies. Overall, though, the

under-age 6 group continued to be the most exposed, accounting for 86.8% of all phone calls during the study's eight years.

When looking at multiyear trends, they found that the same age group had an increased exposure of 16.8% from 2018 to 2020. But that exposure rate declined by 6.8% from 2020 to 2022, during the pandemic and lockdowns. Conversely, the annual exposure rate in adults from 2014 to 2022 rose by 147.1% and in adolescents, rose by 85.4% from 2014 to 2017 and again by 155.3% from 2017 to 2018.

Of all exposures, the most serious medical outcomes and hospitalizations were experienced by children less than age 6. The researchers concluded, "Additionally, exposures have increased among older children, adolescents and adults. Renewed safety efforts are warranted to protect prior public health gains and further reduce exposures."

Newswise⁷ notes that according to past research, the American Society for Testing and Materials, now ASTM International, published a voluntary standard in 2015. The operative word in the statement being "voluntary." Recent updates were made in March 2022, but those did not substantially change the scope of the standard.

"The voluntary standard, public awareness campaigns, and product and packaging changes to-date have improved the safety of these products, but a high number of children are still exposed each year," said Dr. Christopher Gaw, senior author of the study and emergency medicine physician. "There is still room for improvement."

Liquid Laundry Packets More Toxic Than Other Detergents

The higher toxicity associated with liquid laundry detergent packets as compared to traditional liquid or powder detergents is not well understood.⁸ Reformulating the products may reduce the severity of the consequences of exposure, but more is required to educate the public about the toxicity of highly concentrated packets.

Gary Smith, co-author of the study and director of the Center for Injury Research and Policy, explains that the voluntary safety standards allow manufacturers to use six

different ways to meet the requirement for child-resistant containers rather than conforming to the 1970 Poison Prevention Packaging Act (PPPA), which has been highly effective in preventing unintentional poisoning.

"Requiring that all liquid laundry detergent packet packaging be PPPA-compliant would be an important next step in reducing child access to these products," he said. "In addition, each laundry packet should be individually wrapped with child-resistant packaging, which would provide important layers of protection for this highly toxic product."⁹

Laundry Pod Exposure Exacerbated by the Tide Pod 'Challenge'

Tide Pods were developed with the combined efforts of more than 75 employees and 450 product sketches and packaging. Thousands of consumers weighed in with their opinions. P&G launched Tide Pods during the 2012 Academy of Awards, encouraging consumers to "pop" Tide Pods in the machine and watch their clothes brighten with a "pop."¹⁰

The lightweight design, colorful swirl, and squishy feel were an instant hit with consumers, propelling sales to \$500 million in one year and garnering the company 75% of the single-dose laundry packet market. In addition to the look of the product, people also appear to like the way they feel in their hands.

According to Dr. Frédéric Basso, a professor at The London School of Economics and Political Science, Tide Pods took advantage of a trend in marketing known as "food imitating products."¹¹

By creating a visual or emotive link to food or other positive experiences, the manufacturers hoped that consumers would not associate doing laundry with an unpleasant or boring chore. However, there were consequences. Within two months, there were nearly 250 young children who had eaten the pods, prompting P&G to change the packaging and the container.¹²

In 2012, the New York Daily News called for the Consumer Product Safety Commission to crack down on detergent company pods that looked more like candy. New York Sen. Charles Schumer commented, "These pods were supposed to make household chores easier, not tempt our children to swallow harmful chemicals. I saw one on my staffer's desk and I wanted to eat it."¹³

Schumer noted that the pods had been on the market in Europe for several years at that point, where they had also caused serious injuries. He didn't think the products should be banned but "I don't know why they make them look so delicious," he said.¹⁴ Tide Pods then became an internet sensation, propelled by the Tide Pod "Challenge" that encouraged children and teens to eat the detergent pods.

As demonstrated in this video, ingestion has dire consequences for anyone who is enticed by the look and feel of the laundry detergent pods, or foolishly believes that consuming them as a part of a challenge will not harm their health. As explained in the video, detergents are either highly alkaline or highly acidic, both of which cause devastating damage to any tissue it touches, including the mouth, esophagus and trachea.

Potential Effects From Chemicals in 'Fragrance'

However, it isn't just the pH of the product that causes damage, but also the chemicals added to the detergents for fragrance and smell. Many laundry detergents base their ad campaigns on the ability of their products to keep your clothes fragrant for days or weeks after washing. This characteristic of detergent is valued by some consumers to the point that magazines publish analyses of how well each smells and for how long.¹⁵

Yet, while the chemical combinations in the ingredient "fragrance" are toxic to your senses, they are protected as "trade secrets." According to the FDA, the cosmetics market must reveal their ingredients in the label under the Fair Packaging and Labeling Act, but according to the regulation, the list cannot be forced from the company to disclose "trade secrets."¹⁶

"For example, fragrance and flavor ingredients do not need to be listed individually on cosmetic labels, because they are the ingredients most likely to be 'trade secrets.' Instead, they may be listed simply as 'fragrance' or 'flavor.'"

As I have shared in the past, **one artificial fragrance** can contain dozens of potentially toxic chemicals. When you consider that the industry has 3,100 stock chemical ingredients for their fragrances, you literally could be exposed to thousands of these chemicals every day.

Research by Anne Steinemann, formerly with the University of Washington and currently a professor of civil engineering at the University of Melbourne, Australia, and colleagues tested 25 household products, including air fresheners and all-purpose cleaners, many of them "top sellers" in their category. The team found the average number of volatile organic compounds (VOCs) emitted was 17. They wrote in the journal *Environmental Health Perspectives*:¹⁷

"A single fragrance in a product can contain a mixture of hundreds of chemicals, some of which (e.g., limonene, a citrus scent) react with ozone in ambient air to form dangerous secondary pollutants, including formaldehyde. The researchers detected 133 different VOCs. Most commonly detected were limonene, α - and β -pinene (pine scents), and ethanol and acetone (often used as carriers for fragrance chemicals).

Each product emitted [one to eight] toxic or hazardous chemicals, and close to half (44 percent) generated at least 1 of 24 carcinogenic hazardous air pollutants, such as acetaldehyde, 1,4-dioxane, formaldehyde or methylene chloride. These hazardous air pollutants have no safe exposure level, according to the U.S. Environmental Protection Agency."

You can't tell what types of toxic chemicals might be lurking in your favorite cleaning supplies because such labeling is not required. Fragranced products, which include many commercial cleaning and laundry products, are particularly problematic. Another of Steinemann's studies¹⁸ revealed that 34.7% of Americans reported health problems, such as migraine headaches and respiratory difficulties when exposed to them.

Reduce Exposure Risk Using Nontoxic Cleaners

When you clean your home with commercial sprays, wipes, scrubs and polishes, you're putting toxins into your home environment instead of removing them. The same goes for most laundry detergents, dryer sheets and air fresheners. Even those strong-smelling lemon and pine scents – the ones many people think are the epitome of a clean home – are created by toxic volatile organic compounds (VOCs).

I offer many examples of how you can [keep a clean home with nontoxic cleaners](#), including disinfecting, glass cleaning, dusting and furniture polish. For how to make these cleaners with what you may already have in your home, check out the article. There are also ways you can clean your laundry without sacrificing scent or cleanliness and without using store-bought chemicals.

Castile soap is natural, biodegradable and chemical-free, plus incredibly versatile (as are most natural cleaning supplies). You can use it for personal care, laundry and cleaning around your home. For instance, mixing baking soda with a small amount of liquid castile soap makes an excellent paste for cleaning your tub and shower.

You can easily freshen your laundry without risking your family's health by simply spritzing your wet laundry with a mix of water and a few drops of essential oil before placing it in the dryer. Alternatively, add roughly one dozen drops to an old wool sock, and put it in the dryer with your laundry.

You can even make your own laundry detergent, adding in any essential oils you like for a natural scent. Here's a recipe from Mommypotamus to get you started.¹⁹

Homemade Natural Laundry Detergent

Ingredients

- 6 cups washing soda
- 3 bars coconut oil soap (4.5 to 5 ounces each)

- Lemon essential oil (optional)

To Make

1. Cut soap into small chunks. Add to a food processor along with the washing soda.
2. Blend until you have a fine powder. You may want to lay a dish towel over the top of your food processor to prevent a fine mist of powder from floating into the air. Also, let it settle a bit before opening the container or the powder will float onto your kitchen counter!
3. Pour into a clean container (keep the essential oil next to the jar and add five drops with each load).

Sources and References

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- ⁶ [Clinical Toxicology, 2023;61\(11\)](#)
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- ¹¹ [CNN Business, July 18, 2022, Sub 2](#)
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- ¹⁹ [Mommypotamus, How to Make Natural Laundry Detergent](#)