



**WALMART**

**GET THE  
LEAD OUT**

**NEARLY 25%**  
OF WALMART JEWELRY  
TESTED CONTAINS  
HIGH LEVELS OF LEAD



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Tested Contains High Levels of Lead**

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Washington Toxics Coalition

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# WALMART – GET THE LEAD OUT

**Nearly 25% of Walmart Jewelry Tested Contains High Levels of Lead**

Walmart, the nation's top retailer (1), announced on September 17, 2013 that it plans to phase out ten harmful chemicals from household cleaning, personal care, and beauty and cosmetic products by 2015 (2, 3). Bowing to pressure from health and environmental groups, and following the lead of other manufacturers such as Johnson & Johnson and Procter & Gamble, Walmart is receiving much praise for this announcement (2). But testing of Walmart jewelry products, which took place only 12 days before Walmart's announcement, reveals that Walmart is selling products with extremely high levels of lead, known to be toxic to the developing brain (4, 5, 6, 7).

The recent testing of Walmart jewelry products was carried out by Washington Toxics Coalition (WTC). WTC purchased 34 jewelry products identified as "Distributed by Wal-mart Stores, Inc." in August of 2013 at the Lynnwood, Washington Walmart store. A variety of items such as necklaces, earrings, and bracelets were chosen. This jewelry was analyzed for heavy metals using an XRF analyzer.

## Key Findings

1. Nearly 25% (8 out of 34) of the Walmart jewelry products purchased tested positive for high levels of lead. Lead was found in more than one component of some of the products, such as both the necklace and earrings in a set.
2. Lead levels in the eight Walmart jewelry items in which lead was detected ranged up to 357,790 parts per million (ppm), or nearly 36%. According to these screening results, six of the products tested at more than 10% lead.

## Results of Testing

### Concentrations of lead detected in Walmart jewelry 9/5/13

Product	Component	Color	XRF Results in ppm, %
Pink Jewel Circle Pendant	Circle Pendant, Crystal and Metal	Silver, Pink	244,364 ppm* (24.4%)
Clear Jewel Circle Pendant	Circle Pendant, Crystal and Metal	Silver, Clear	344,032 ppm* (34.4%)
"Royal" Necklace Set	Necklace, Crystal and Metal	Silver, Clear	21,402 ppm* (2.1%)
"	Earring, Crystal and Metal	Silver, Clear	296,143 ppm* (29.6%)
Intertwined Double Heart Necklace Set	Intertwined Hearts, Crystal and Metal	Silver, Clear	267,256 ppm* (26.7%)
Horseshoe Necklace Set	Jeweled Horseshoe Pendant, Crystal and Metal	Silver, Clear	357,790 ppm* (35.8%)
"	Jeweled Heart Pendant, Crystal and Metal	Silver, Clear	48,453 ppm* (4.8%)
"	Jeweled Key Pendant, Crystal and Metal	Silver, Clear	303,526 ppm* (30.4%)
Butterfly Necklace Set	Purple Jeweled Butterfly Pendant, Crystal and Metal	Purple, Silver, Clear	15,029 ppm* (1.5%)
Jeweled Balls Necklace	Jeweled Ball, Crystal and Metal	Silver, Clear	286,761 ppm* (28.7%)
Heart Posts Earrings Set	Heart Post, Painted Metal	Purple	7,748 ppm (0.8%)

\*Average of multiple results



Jewelry items were analyzed on September 5, 2013 using a Thermo Niton XL3t 700 x-ray fluorescence spectroscopy (XRF) analyzer. The testing methodology is widely established for a number of materials for screening purposes, as well as compliance for some materials. The products tested are often made of multiple types of material or matrices. The presence of multiple materials in one product may interfere with the analyzer's ability to quantify the elements accurately and the test results may vary depending on the orientation between the object under test and the testing device. Where the testing is not able to isolate a single material, the reported levels may represent an averaging of the levels in the different materials. More exhaustive testing with XRF, as well as laboratory testing, could provide more detailed findings on the levels of elements and associated compounds.

## Lead – Health Effects

Children and adults experience adverse health effects from lead exposure (4, 5). The most sensitive target of lead exposure in people is the nervous system, but all organ systems can be affected (5). The U.S. Consumer Product Safety Commission (CPSC) states that, “The adverse effects of lead poisoning in children are well documented (8).” Lead is known to harm the developing nervous systems of children (4, 5, 6, 7). Children show decreasing IQ levels, increasing ADHD, and increased hearing impairment as blood lead levels increase (4, 5, 6, 7). Lead also disrupts balance and impairs peripheral nerve function (5). Some researchers suggest that lead exposure has significantly contributed to problems such as juvenile delinquency and violent crime (5). Health effects of exposed children continue into adulthood and can include renal problems, reproductive problems, and hypertension (5). Even very small levels of lead exposure are hazardous to a child’s developing nervous system (9).

The Centers for Disease Control and Prevention (CDC)’s Agency for Toxic Substances and Disease Registry (ATSDR) warns as follows about lead exposure: “There may be no threshold for developmental effects on children (5).” The American Academy of Pediatrics concurs by stating that, “...there is no threshold yet identified for this effect (impaired cognition)” (6, 10). And even though progress has been made on the issue of lead exposure (6), the problem persists. The CDC emphasizes the seriousness of lead exposure: “Protecting children from exposure to lead is important to lifelong good health. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention, and academic achievement. And effects of lead exposure cannot be corrected” (11).

Lead-exposed adults also show health impacts. Examples include mood changes, decreased hand dexterity and reaction time, increased nervousness, and more (4, 5). Lead is also implicated in accelerated cognitive decline and in the risk of Parkinson’s Disease in older adults (12).

### **Lead standards for children’s products:**

In recent years Americans learned that many companies were using lead to make children’s toys and jewelry (4) —and that it was legal. Congress acted in 2008 to restrict lead in children’s products (13), following Washington state’s adoption of the most stringent lead standards in the nation (14).

Current regulations limit lead in children’s products to 100 ppm (13, 14). A children’s product is a product designed or intended primarily for children 12 years of age or younger (13, 15). The CPSC gives several factors to consider when calling something a children’s product. These factors include not only the manufacturer’s statements about intended use but also the product’s packaging, display, promotion, advertising, and whether the product is commonly recognized as intended for children ages 12 and younger (15).

The packages for jewelry tested in this study were labeled in the following way:

“Caution: Not intended for use by children under 14.”

“This product intended for adult fashion and decorative use only. Do not put items in mouth or ingest.”

Many of the Walmart jewelry designs purchased by WTC for this study are likely to appeal to young children, not just adults. Items that tested high for lead included brightly colored hearts, a purple butterfly with sparkly jewels, and a lucky horseshoe/key/heart interchangeable necklace set. Designs like these are commonly recognized as intended for tween-aged (10 – 12 years old) or younger children. It is highly unlikely that children 12 years old and under read the fine print on the back of the package when they have their heart set on a cute, shiny piece of jewelry.

Jewelry that WTC found to contain lead hung on display racks at Walmart within easy reach of children. There were no signs on or near the display racks stating that this jewelry was intended for adults and that it could pose a health hazard to children.

The CPSC states that, “Children who wear jewelry containing accessible lead can ingest the lead by handling jewelry and putting their hands in their mouths, by putting jewelry directly in their mouths, or by ingesting either parts or whole pieces of jewelry (8).” It is clear that exposure can occur if lead-containing jewelry is worn, handled, mouthed, or ingested by children. This can happen in the aisles at Walmart and it can happen once the package with the fine print is taken off.

But it isn’t only children who are at risk of being exposed to harmful levels of lead by handling lead-containing jewelry. Adults such as Walmart employees, workers throughout the Walmart supply chain, and adult customers who shop at Walmart stores may also be exposed if they produce, handle or wear lead-containing jewelry.

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This necklace tested at 34.4% lead.



This necklace tested at 28.7% lead.



The horseshoe in this set tested at 35.8% lead.



# WALMART — GET THE LEAD OUT

**We urge Walmart to do the following:**

- 1. Immediately remove these lead-containing jewelry products from its stores.**
- 2. Publicly disclose the 10 chemicals being reduced or phased out in personal care products and cleaning products.**
- 3. Commit to a timeline for phasing out Mind the Store's list of Hazardous Hundred chemicals, which includes lead, from all of its products.**

In addition, we call on Consumer Product Safety Commission to investigate these products for compliance in accordance with the Consumer Product Safety Improvement Act and take appropriate enforcement action.



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Washington Toxics Coalition uses groundbreaking research, top-notch advocacy, in-depth grassroots organizing and high quality consumer information to help create a healthier and just world by promoting safer products, chemicals, and practices, and a healthier future for the next generation.