



# TOXIC TOYS IN ONONDAGA COUNTY



A  
report  
by



Clean & Healthy  
New York



NEW YORK LEAGUE OF  
CONSERVATION VOTERS  
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# Executive Summary

Children's products containing toxic chemicals are for sale in Onondaga County, New York. These chemicals are dangerous, unnecessary and pose health risks to children like cancer, lower IQ scores and organ damage.

This survey report looked for the presence of some of the most hazardous chemicals in products intended to be used by children on a daily basis—and found plenty to be concerned about. While recent government reports have shown that there were 11,359 uses of toxic chemicals in children's products in 2014, this report is the first to survey a targeted list of the most dangerous ones on the store shelves in Onondaga County.

We visited Target, TJ Maxx, Dollar General, Children's Place, and 99 Cent City stores in Onondaga County in March 2015 and tested a variety of toys, accessories, novelty products and apparel. Products were tested using a handheld device known as an "XRF Analyzer" (X-Ray Fluorescence).

Not all products tested contained chemicals of concern; this report documents the ones that did. We are not reporting products that did not contain our target heavy metals. We found:

- Arsenic in two products: jewelry and hair clips
- Antimony in two products: jewelry and hair clips
- Cadmium in three products: bracelets and clothing
- Cobalt in nine products: a kaleidoscope, a xylophone, jewelry, accessories, a purse and toy cars
- Lead in five products: a xylophone, hair clips, jewelry, and accessories
- Mercury in one product: a xylophone

This survey report, while not exhaustive, shows that toxic heavy metals are used in a variety of children's products and sold at discount retailers, mid-priced big-box stores as well as department stores. We know that there are thousands of such products for sale because of government reporting data; this report shows that they are present on store shelves in Onondaga County.

There is a wealth of growing scientific evidence linking chemicals in commonly-used children's products to diseases and disorders of environmental origin. The incidence of these health impacts is on the rise. Children are uniquely vulnerable because they eat, drink and breathe more — pound for pound — than adults, put their hands and objects in their mouths more often, and are undergoing developmental stages that are particularly sensitive to disruption from toxic chemicals.

New York legislators should protect children from toxic chemicals by banning the sale of toys and children's products that contain them. Retailers should also refrain from selling children's products containing toxic chemicals.

## Acknowledgments

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Research: Bobbi Chase Wilding, MS

Special thanks to:

Bobbi Chase Wilding, Deputy Director, CHNY

Christopher Goeken, Director of Public Policy, NYLCVEF

Kathleen Curtis, Executive Director, CHNY

# INTRODUCTION

Nontoxic products occupy store shelves right next to those that contain toxic chemicals. There is no way a parent can tell by looking at them, reading the label, or visiting the company website which ones are safe and which ones contain hidden hazards. Even the most knowledgeable parents can't protect their families.

Children and babies are exposed all day, every day to toxic chemicals in products made for their use. Their rapidly developing brains and growing bodies are more susceptible to the health impacts of these hidden hazards. Parents can't get the information they need to shop their way out of this problem. Stronger laws are needed to adequately protect our children.

Some states have taken action. The Children's Product Safety Act of 2008 in Washington State requires children's product makers conducting business in the state to disclose the use of dangerous chemicals. This disclosure has shed light on the fact that dangerous chemicals are in thousands of products intended for everyday use by children and babies.

The results of testing in Onondaga County show that the problem of toxic toys is not just local to Washington State, but widespread. Toys and children's products containing lead, cadmium, mercury and other highly dangerous chemicals were easily found on store shelves in each of the Onondaga County stores surveyed.

If we fail to address this public health and environmental problem, exposure to toxic toys and other products today can cause lifelong harm to many children in our community. Legislators in New York should act now to ban the most dangerous toxic threats. Retailers must stop putting dangerous products in their stores, so parents will know that the toys they buy are safe. Children and babies in Onondaga County can't wait any longer.

# The Science: Toxic Chemicals Cause Health Problems

Toxic chemicals threaten children's health. They are known to cause cancer, learning disorders, genetic anomalies, hyperactivity, developmental disorders, asthma, obesity and infertility. Childhood leukemia increased by 62% and brain cancer increased by 39% since 1973. Asthma incidence and mortality have more than doubled since 1991. In all, 25% of developmental disorders are due to direct toxic environmental exposure, or combinations of exposures with genetic susceptibility.<sup>1</sup> Genetics loads the gun, environment pulls the trigger.

Toxics in household products disproportionately impact children and babies. Babies' and children's growth needs cause them to consume more than double the food and water and breathe more air proportionally than adults. Infants typically double in weight by five months of age and triple by one year. This rapid growth makes the developing organs, especially the brain, highly vulnerable to toxic chemicals. Hand-to-mouth behavior of young children also puts them at increased risk. They spend time on the ground, causing them to breathe in dust and particles that

contain toxics. They also put everything in their mouths, greatly increasing the likelihood that they will ingest dangerous chemicals that leach out of products. Children's immature metabolism makes them less able to break down and excrete toxic chemicals.<sup>2</sup>

Toxic chemicals in household products contribute to the rise in diseases. In 2012, childhood cancer was the second leading cause of death (after accidents) among New York's children from 5 to age 15. The rates of childhood cancers have been trending upward since 1975. Childhood cancer survivors go on to have chronic health issues including second cancers, heart damage, osteoporosis and thyroid problems. As the 2008-09 President's Cancer Panel stated, "the true burden of environmentally induced cancer has been grossly underestimated. With over 80,000 chemicals on the market in the United States, many of which are in products used by millions of Americans in their daily lives, are unstudied and largely unregulated, exposures to potential environmental carcinogens is widespread."<sup>2</sup>

Diseases of environmental origin are preventable. Eliminating exposure to environmental hazards is the best defense against them. Efforts to remove toxic exposure have been successful in the past. The removal of lead from gasoline resulted in a 90% reduction in blood lead levels in American children; decreased use of alcohol during pregnancy has greatly reduced the number of babies born with fetal alcohol syndrome. Although cancer is caused by a complex interaction of genetic predisposition and exposure to environmental factors, we do know that reducing exposure to known carcinogens will result in a reduction in the incidences of cancer.

Further, the reduction of the use of neurotoxins will reduce the incidence of lowered IQ and learning disabilities. It's also logical that reducing the use of reproductive toxicants will reduce the incidence of infertility. Reducing the use of asthmogens will reduce the incidence of asthma, as well as the number and frequency of asthma attacks.

The Problem: Toxic chemicals are added to products that are found in virtually every home and on store shelves throughout this country. Products that children use every day contain toxic chemicals. Each and every day, children and babies are at risk of developing chronic and debilitating illnesses due to unnecessary,

preventable exposure to toxic chemicals.

Current regulations are inadequate to protect our children, our families, our communities and the environment. The Toxic Substances Control Act of 1976, the Consumer Products Safety Act of 1972, and the Consumer Products Safety Improvement Act of 2008 have allowed for very limited regulation of chemicals. But as the data in this report shows, current protections do not go nearly far enough.

In 2008, the State of Washington passed the Children's Safe Products Act which requires makers of children's products sold in Washington to report to the state if these products contain any of a list of 66 Chemicals of High Concern to Children. This landmark legislation has opened a window, documenting the alarming prevalence of previously hidden hazards in children's products including clothes, car seats, bedding, tableware and toys. Washington State's children's product database shows 11,359 uses of toxic chemicals in children's products.<sup>3</sup>

# The Data: Onondaga County Stores Sell Toxic Children's Products

Clean and Healthy New York tested products purchased in Onondaga County stores including Target, TJ Maxx, Dollar General, Children's Place, and 99 Cent City. In this report, we identify a dozen products for children that contain chemicals that can harm their health, as detected by an X-Ray Fluorescence Analyzer (XRF for short).

The XRF can detect a range of elements like lead, mercury, chlorine and bromine, but it can't detect complex molecules like most flame retardants or pesticides, or volatile organic compounds. For this reason, we focused on identifying products containing the following heavy metals.

We found:

- Arsenic in two products: jewelry and hair clips
- Antimony in two products: jewelry and hair clips
- Cadmium in three products: bracelets and clothing
- Cobalt in nine products: a kaleidoscope, a xylophone, jewelry, accessories, a purse and toy cars
- Lead in five products: a xylophone, hair clips, jewelry and accessories
- Mercury in one product: a xylophone

# Toxic chemicals in children's

1. Orange Olaf sweatshirt



Cadmium

2. Disney Pink Olaf sweatshirt



Cadmium

3. Tin kaleidoscope



Cobalt

4. Girls Best Friends bracelet set



Cadmium, Cobalt

5. Bling' Style Head Sliders Jewelry Kit



Lead, Arsenic, Cobalt, Antimony

6. Vogue Decoration Jewelry Set



Antimony, Arsenic, Cobalt, Lead

# products & toys in Onondaga County

## 7. Winking purse



Cobalt

## 8. Fashion accessories



Cobalt, Lead

## 9. Padded bunny hair clip



Lead

## 10. Xylophone



Arsenic, Cobalt, Lead

## 11. Hot Wheels Cars



Cobalt

## 12. Matchbox Cars



Cobalt

# Summary & Recommendations

Makers of children's products reported widespread use of toxic chemicals under a landmark Washington State disclosure law. In all, 11,359 uses of toxic chemicals in children's products were reported in 2014 alone. Our survey showed that these products are not just sold far away – they are on store shelves right here in Onondaga County.

A handful of major retailers have told their suppliers that they will no longer accept products that contain some chemicals of concern to human health and the environment. But it is clear from the results of our survey that voluntary efforts alone are not enough to get toxic chemicals out of children's products.

A comprehensive federal law to reform the nation's chemical policy has been stalled for a decade. In this absence of congressional action, 33 states considered or enacted policies in 2014 to address toxic chemicals in consumer products.

In New York State, a law to ban the most toxic chemicals and require disclosure of a more comprehensive list of others has passed in the Assembly several times but stalled in the State Senate. In 2014, 40 state senators co-sponsored the Child Safe Products Act – many more than it needed to pass – but Senate leadership blocked its passage in the final days of the session. This year, the bill was recently introduced in the Senate and already has 31 co-sponsors.

# Summary & Recommendations

## **Lawmakers should protect children from toxic chemicals by banning their use in toys and children's products.**

The New York State legislature should address the issue of toxic toys in children's products. In the absence of state or national policies, however, localities are acting to protect their local communities. Albany County recently banned the use of seven toxic chemicals and heavy metals in children's products, and similar laws are making their way through the county legislatures in Westchester and Suffolk. Several counties banned the use of BPA in baby bottles and sippy cups which ultimately led to the state doing the same. Without state action, local legislators should protect their residents by enacting bans on dangerous chemicals in children's products.

## **Retailers should refuse to sell children's products containing toxic chemicals.**

Retailers should ensure that products on their shelves are free of toxic chemicals. Major retailers and those that specialize in baby products should lead the way by making sure their products do not contain them. Retailers can learn how through the Getting Ready for Baby Campaign, which works with retailers to urge their suppliers to stop using hazardous chemicals in infants and children's products.

# Appendix I

#	Description	Store	Part
1	Orange Olaf Sweatshirt	Target	zipper pull
2	Disney Pink Olaf Sweatshirt	Target	metal snowflake on zipper pull
3	Tin Kaleidoscope	Target	eyepiece end
4	CS Girls Best Friends Bracelet Set	TJ Maxx	purple crown
4	CS Girls Best Friends Bracelet Set	TJ Maxx	purple broken heart
4	CS Girls Best Friends Bracelet Set	TJ Maxx	chain
4	CS Girls Best Friends Bracelet Set	TJ Maxx	pink heart rear
5	Blingn Style Head Sliders Jewelry Kit	Dollar General	guitar clip
5	Blingn Style Head Sliders Jewelry Kit	Dollar General	shooting star clip
6	Vogue Decoration Jewelry Set	99 Cent City	heart "locket" rear
6	Vogue Decoration Jewelry Set	99 Cent City	back of hair clip
7	Winking Purse	Children's Place	chain
8	Fashion Accessories	99 Cent City	orange rhinestone on hair clip
9	Padded Bunny Hair Clip	99 Cent City	metal clip
10	Xylophone	Dollar General	red metal bar
10	Xylophone	Dollar General	orange metal bar
10	Xylophone	Dollar General	blue metal bar
11	Hot Wheels Cars	Target	blue + orange stripe
12	Matchbox Cars	Target	red car hood

**Total number of products with each chemical**

# Data on Our Findings

## Quantity of chemical in parts per million (ppm)

Lead	Mercury	Arsenic	Cobalt	Cadmium	Antimony
				420	
				197	
			1183		
				911	
				232	
			2915	204	
				105	
30		4			545
19		4	67		410
29		6	52		633
147					
			28400		
1094			290		
338					
77	35		20700		
331	77		127000		
296	97		138000		
			2899		
			2192		

# Appendix II: Chemical Factsheet

Chemical	Where commonly found	Health effects
Antimony	A heavy metal used in glass, ceramics, pottery cables, batteries, and fire retardant chemicals	Cardiac toxicity, irritation of respiratory tract, liver damage premature births and spontaneous abortions
Arsenic	A mineral found children's car seats, stuffed toys, bed frames, arts & crafts supplies	Cardiac toxicity, irritation of respiratory tract, liver damage premature births and spontaneous abortions
Benzene	Organic chemical found in textiles and dyes, including bibs, and clothing.	Genetic mutations, leukemia, inhibited fetal growth and development
Cadmium	A heavy metal used in children's car seats, sleeping bags, toys, arts & crafts supplies, tobacco smoke, plant fertilizers, and industrial paints	Breast or uterine cancer, early onset puberty, kidney and lung damage, loss of motor skills and behavior dysfunction
Cobalt	A heavy metal used in ceramics, magnets, paint, pacifiers, teething rings, bibs, changing mats, bath and stuffed toys, jewelry and utensils	Carcinogen, lung cancer and reduced lung function, memory deficits, behavioral problems and cognitive impairment.
Lead	A heavy metal used in plastic toys, baby rattles, children's jewelry	Neurotoxin and endocrine disrupter, lower IQ scores, memory, auditory and visual dysfunction, slowed growth, anemia, poor impulse control and behavioral problems
Mercury	A heavy metal used in plastic toys, baby rattles, children's jewelry	Decreased motor function and memory, numbness, hearing and speech impairment, coma and death

# Methodology

In April 2015, we visited a number of stores in Onondaga County and purchased over a dozen children's products. We then tested the toys thoroughly in our offices, using an X-Ray Fluorescence Analyzer. Sampling was not random: we used information from Washington State's database as our guide, along with past experience in testing products. Our testing was not a systematic survey of any product type, brand, or store. We are not reporting products for which we found no chemicals of concern or found them only at levels below 10 parts per million. A number of products contained less than 10 parts per million of some heavy metals, but we only report these levels if higher levels of another chemical were found.

About the XRF Analyzer:

The portable X-Ray Fluorescence Analyzer is one produced by Innov-X. XRFs are used by government agencies and product manufacturers to test consumer products for toxic chemicals. XRFs can test elements such as lead, cadmium, chlorine, arsenic, mercury, cobalt, and antimony. It can detect elements at the level of parts per million.

## FOOTNOTES

1. National Academy of Sciences Committee on Developmental Toxicology, (2000) Scientific Frontiers in Developmental Toxicology and Risk Assessment, Available from:  
[http://www.nap.edu/openbook.php?record\\_id=9871&page=R1](http://www.nap.edu/openbook.php?record_id=9871&page=R1).
2. Landrigan, et al, New York State's Children and the Environment, A Report from the Children's Environmental Health Center, Icahn School of Medicine at Mount Sinai, December 2013.
3. Reuben SH, (2010) 2008-09 Annual Report Reducing Environmental Cancer Risk: What We Can Do, Now, Bethesda MD. The President's Cancer Panel.
4. <http://www.ecy.wa.gov/programs/swfa/cspa/search.html>.

# CLEAN & HEALTHY NEW YORK

*Clean and Healthy New York, Inc. (CHNY) is a statewide environmental health advocacy organization that promotes safer chemicals, a sustainable economy, and a healthier world.*

*Learn more at [www.cleanhealthyny.org](http://www.cleanhealthyny.org).*



*New York League of Conservation Voters Education Fund (NYLCVEF) educates, engages and empowers New Yorkers to be effective advocates on behalf of the environment.*

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