



## State Law, National Change

**How a California Law Makes Air, Water, & Products  
Safer for Children & Families Nationwide**





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## 30 years of success

In 1986, California voters overwhelmingly approved an innovative law that set new standards for protecting people from toxic chemicals. The law is called the Safe Drinking Water and Toxic Enforcement Act, but most people refer to it by its ballot measure number, Proposition 65, or Prop 65.

As suggested by its name, the law sets rules for protecting drinking water in California from pollution by cancer-causing chemicals or chemicals that can cause serious reproductive health problems. The law also calls on businesses to notify Californians when they would be exposed to such harmful chemicals in the air or in consumer products. The basic concept of this part of the law is simple: if businesses are required to warn consumers about harmful chemicals before they buy products, consumers can act to protect themselves and their families.

Much of the success of the law has taken place behind the scenes. In untold numbers of industries, companies choose to change the way they make products – they choose to preemptively remove harmful chemicals – in order to avoid putting warning labels on their products. Everyone has seen Prop 65 warning signs in airports, parking garages, and other public places, but the law’s major success in ensuring safer products has been mostly invisible.

Still, in its almost thirty year history, there have been several prominent cases in which Prop 65 was essential in creating landmark public health gains for California and across the country.

The Center for Environmental Health is proud to have played a part in some of these cases. In this report, we share a few of these Prop 65 success stories.



2007:  
8000 ppm lead



2013:  
No detectable  
lead

### Curious George

Most of us have childhood memories of George, but they don't include a toxic chemical like lead. Lead is infamous for its ability to damage children's brains, leading to learning and behavior problems, and is also toxic in many other ways.

In the fall of 2007, CEH purchased a Curious George doll from Toys R Us. Independent lab testing showed that the plastic face of the doll was contaminated with 8000 parts per million lead, 80 times more than today's standards allow. CEH initiated Proposition 65 litigation with Toys R Us. The result was a clear change in the way that the Curious George doll was made. Rather than a plastic face, Curious George is now made entirely of cloth. 2013 testing by CEH found no detectable lead in the new product.

In 2007, Curious George was not alone as a lead-tainted toy. In addition to Toys R Us, CEH notified WalMart, Kmart, Sears, KB Toys, Target, and other toymakers and retailers of lead violations under Prop 65. Prompted by our legal notices, the California attorney general filed Prop 65 lawsuits against these and other toy companies.

CEH's previous Prop 65 cases that exposed health threats to children from lead-tainted children's products, including backpacks, diaper rash creams, and Curious George, helped convince Congress to pass the first-ever federal law banning lead from all products made for children age 12 and under. The Consumer Product Safety Improvement Act was signed into law by President Bush in 2008 and has successfully eliminated lead poisoning hazards from millions of products sold to children across the country.





## Marvin Engineering

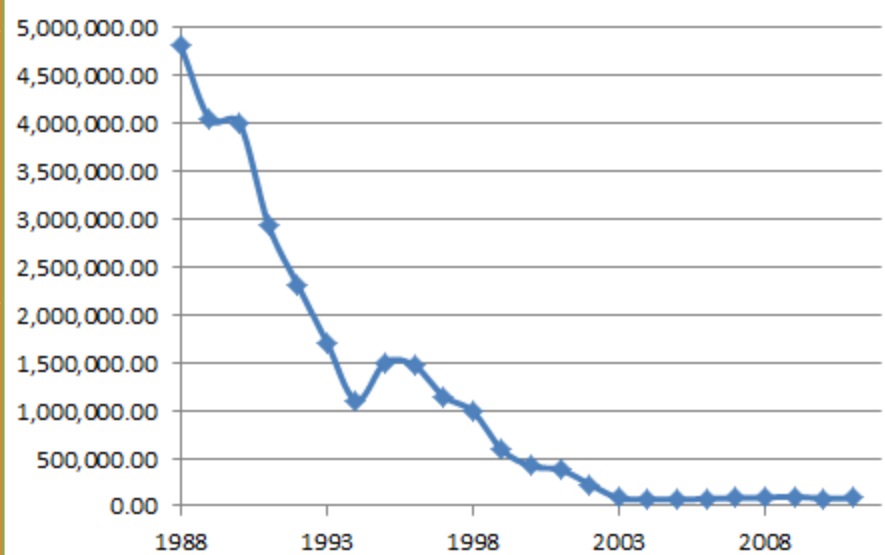
Marvin Engineering is a privately owned company in the Los Angeles County town of Inglewood that specializes in manufacturing aerospace and defense equipment, including missile launchers.

In 2005, Marvin Engineering released over a ton of the cancer-causing solvent perchloroethylene (perc.) into its Inglewood neighborhood. The company had been using this chemical to clean and remove grease from metal parts that make up its products. The Marvin facility is near a park, homes, and local businesses, and in 2005, was adjacent to an operating preschool.

In 2006, CEH began Proposition 65 litigation with Marvin Engineering. A year later, Marvin agreed to stop using perc. Since 2008, it has not released any perchloroethylene into Inglewood.

Today, Marvin Engineering is a successful business with 700 employees and \$225 million dollars in annual revenue.

Pounds of perchloroethylene released in CA per year



Marvin Engineering is just one of many California companies that have reduced the use of perchloroethylene since Proposition 65 became law in 1986. Perchloroethylene released into California air declined from almost 5 million pounds per year in 1988 to less than 90,000 pounds per year in 2011.



2005:  
150,000 ppm  
lead



2013:  
No detectable  
lead

## Disney Princess Bracelet

In early 2005, CEH purchased a popular Disney “Princess” bracelet from a major national retail chain. Independent testing showed that the pearl-colored paint on the bracelet’s faux pearls contained more than 15% lead. This is more than 1500 times above today’s safety standards for lead. The bracelet was one of hundreds of pieces of jewelry that CEH, other health advocacy groups, and the California attorney general found in violation of Prop 65 lead safety standards.

As a result of CEH’s research, in the fall of 2005 the Consumer Product Safety Commission announced that Disney had recalled almost 150,000 of the Disney bracelets. But too many other lead-tainted jewelry pieces remained in stores nationwide. CEH testing routinely found jewelry with metal parts that were 90% or more lead. Cases of children poisoned by lead-tainted jewelry were reported in the press, and in 2006, lead-tainted jewelry had tragic consequences when a 4-year old boy died after swallowing a pendant that was nearly 100% lead.

That year, CEH worked with the attorney general to bring Prop 65 litigation against Disney and dozens of jewelry companies. This litigation established strict limits on the amount of lead in California jewelry. Limits were established both for jewelry marketed to children and for adult jewelry.

Today the Disney “Princess” bracelet looks just a little different, but the pearls are fundamentally different: 2013 testing found no detectable lead in the product. Moreover, a report published by CEH in the peer-reviewed journal Environmental Science and Technology demonstrated industry-wide change in jewelry due to Prop 65. Prior to the Prop 65 cases, one study showed that as much as 50% of jewelry purchased in California contained high levels of lead. Following the Prop 65 agreements on lead content, fewer than 5% of more than 1,500 pieces of jewelry tested had lead problems.



## Coke and Pepsi

For decades, the caramel coloring used to give Coke and Pepsi their deep brown color was contaminated with a cancer-causing chemical, 4-methylimidazole.

In 2011, California added 4-methylimidazole to the list of Proposition 65 chemicals. In early 2012, CEH tested Coke and Pepsi before and after the listing came into effect. We found that both companies cleaned up the caramel coloring in their products as a result of the listing and removed the cancer-causing contaminant. In talks with CEH and the California attorney general, Coke and Pepsi stated that the change had been made statewide. That March, the companies stated that they would make the change in California first, and shortly after would change their coloring for the rest of the country, according to press reports.

In the spring of 2013, CEH commissioned testing to check on the companies' progress. Our testing of Coke and Pepsi products purchased in California showed both companies still in compliance with California standards. We then tested products from ten other states. Nine out of ten Coke products were reformulated with safer caramel coloring, but all ten Pepsi products still contained high levels of the cancer-causing 4-methylimidazole. Pepsi now is complying nationwide with California standards.

Prop 65 successfully influenced Coke and Pepsi to make their products safer for Californians, and ultimately for all Americans.

For decades, the caramel coloring used to give Coke and Pepsi their deep brown color was contaminated with a cancer-causing chemical, 4-methylimidazole.



2007:  
2300 ppm lead



2013:  
No detectable  
lead

## Baby Bibs

In 2007, CEH was contacted by Marilyn Furer, a grandmother who was worried that her grandson's baby bib might contain high levels of lead. Marilyn grew concerned about the vinyl baby bib after she saw news reports about CEH's Prop 65 work to eliminate high levels of lead from children's vinyl lunchboxes. She realized that a baby bib made from the same material as a lunchbox might have the same chemical hazard.

She was right to worry. CEH purchased the same vinyl bibs that Marilyn's grandson used from a California Walmart store and tested them at an independent lab. The testing found that the bibs contained high levels of lead, 96 times more than today's safety standard. CEH did further bib purchasing and testing, and also found vinyl bibs at Babies R Us that contained 2,300 parts per million lead, a level 23 times above today's safety standard. We were concerned because toddlers across the country who were eating while wearing these bibs could be needlessly exposed to high levels of lead.

Next, CEH began Proposition 65 litigation with the company that provided the bibs to Walmart and Babies R Us. The result was an agreement that set strict limits on the lead content of baby bibs.

Today, Walmart and Babies R Us sell similar bibs. The price has not changed much, but the lead contamination is dramatically different. 2013 testing found no detectable lead in similar bibs from Walmart and Babies R Us.

Like Curious George, these bibs helped spur the passage of the Consumer Product Safety Improvement Act of 2008 and set strict standards nationwide for lead in children's products.





2010:  
280,000 ppm  
cadmium

## Cadmium in Jewelry

Following a large recall of cadmium-tainted jewelry in 2010, CEH began to investigate this problem in national chain stores.

Later that year, we purchased a flower necklace from a Target store in California. Independent lab testing showed that the flower pendant contained 280,000 parts per million of cadmium, a level that is more than 900 times above today's safety standard. Cadmium is known to cause reproductive harm and is hazardous for both men and women. According to researchers who have reviewed its toxicity, it has the "potential to affect reproduction and development in many different ways, and at every stage of the reproductive process."

Through CEH's Proposition 65 litigation, dozens of major jewelry companies and retailers, including Target, agreed to set strict limits on the amount of cadmium in jewelry.

Today, toxic levels of cadmium in jewelry at Target are no longer a problem. Testing of a flower necklace that CEH purchased in 2013 from Target found that it contains no detectable cadmium.



2013:  
No detectable  
cadmium

According to researchers who have reviewed cadmium's toxicity, it has the "potential to affect reproduction and development in many different ways, and at every stage of the reproductive process."



2010:  
750,000 ppm  
cadmium

## Cadmium in Children's Jewelry

Cadmium in children's jewelry is particularly concerning because children mouth and sometimes swallow jewelry. So CEH's 2010 investigation of cadmium hazards in jewelry included items that are specifically marketed to children.

One example of a piece of jewelry we found was from Justice, a chain that markets to preteens, which seemed especially dangerous. It was a child's necklace with a tasty-looking pendant designed to look like a cupcake. It's hard to imagine anyone would wear the necklace without occasionally licking the "cupcake."

We started Proposition 65 litigation with Justice, and the result (similar to the Target story on the previous page) was a legal agreement that set strict limits on the amount of cadmium in children's jewelry. The limit was added to California's metal-containing jewelry law while the litigation was in progress.

In 2013, Justice was no longer selling cupcake necklaces. We purchased an equally tasty-looking donut necklace and tested it for cadmium - none detected.



2013:  
No detectable  
cadmium



2005:  
55,000 ppm lead



2013:  
No detectable lead

## Lunchboxes

Many of us have at least a few happy memories about our childhood lunchboxes, memories that almost certainly don't involve the toxic metal lead. However, in 2005, lead was frequently found in soft plastic lunchboxes – often in vinyl materials, including interior linings, where children's food is stored.

CEH tested lunchboxes of many colors and characters. The one with the most significant lead problem was an Angela Anaconda lunchbox purchased at Longs, a California drugstore chain that has since been purchased by the national drugstore chain CVS. Angela contained over 55,000 parts per million lead – 550 times above the current safety standard.

Through Prop 65 litigation with more than 20 companies, including the company who made the Angela Anaconda lunchbox, CEH established strict standards for lead in lunchboxes. This work, and the work with toys and bibs discussed earlier, helped to pass a federal law that limited lead content of all children's products.

Angela Anaconda is no longer a popular TV character, but we bought and tested a similar Lalaloopsy lunchbox in 2013. The result? No detectable lead, and vinyl-free.



Our litigation led to strict standards for lead contamination of candy, which also became the basis of a state law. We tested Pelon Pelo Rico last spring, and found good news for California children - no detectable lead.

## Chili Pepper Candies

Lead-contaminated candy was an insidious problem in California for years. Here's how the Orange County Register described the problem in 2004:

The history of Pelon Pelo Rico, Diana Lopez's favorite candy, underscores the inadequate regulatory efforts.

The candy tested high 11 of 59 times in government laboratories since 1994. It was suspected in a string of poisoning cases along the way, records show. But parents received no warning.

In 1994, investigators suspected that Pelon Pelo Rico poisoned two children in Los Angeles County. Then, in 1999, it turned up in connection with a lead-poisoned San Joaquin County child.

Diana began eating the candy in 2000. She ate it for a year before she was diagnosed as a poisoning victim. After investigators ruled out the usual suspects of lead paint and tainted soil, Pelon Pelo Rico taken from her home was tested in 2001. It was two times higher than the state guideline for lead.

That same year, tainted Pelon Pelo Rico was pulled from the home of a poisoned Sacramento boy. Investigators told the boy's mother candy was the likely cause. To date, no action has been taken against the maker of Pelon Pelo Rico.

Soon after this article was published, CEH and the Environmental Health Coalition initiated Prop 65 litigation with candy companies, including the makers of Pelon Pelo Rico. We were joined by the California attorney general, and the litigation led to strict standards for lead contamination of candy, which also became the basis of a state law.

We tested Pelon Pelo Rico last spring, and found good news - no detectable lead.





**2012:**  
Chlorinated Tris  
71,300 ppm

**2017:**  
meets fire safety  
standards with no  
toxic chemicals

CEH was particularly concerned about a cancer-causing chemical in the nap mats because of the potential for children to be exposed.

## Flame Retardants in Foam Products

In 2012, an award-winning national news series from the Chicago Tribune brought widespread attention to the health problems related to flame retardants which are widely used in furniture, children's nap mats and mattress pads, and other foam-filled products. The Tribune report exposed how flame retardant companies manipulated science to hide the fact that these chemicals do not provide fire safety benefits in these products.

In 2011, California added chlorinated Tris, a common flame retardant, to the state's list of chemicals known to cause cancer. Independent testing commissioned by the CEH found that many companies were selling mattress toppers, children's nap mats, upholstered furniture and other products that contained chlorinated Tris without the warnings required by Proposition 65.

This included Carpenter Company, a major foam provider that boasts it "produces more flexible polyurethane foam than any other company in the world." CEH was particularly concerned about a cancer-causing chemical in the nap mats because of the potential for children to be exposed.

In 2015, CEH and Carpenter reached a legal agreement requiring the company to end its use of chlorinated Tris and other hazardous flame retardants in their foam products. The agreement was in keeping with Carpenter's founding philosophy: "We must do the best we can to serve ourselves, but we should not forget that in the final analysis, we serve society whose approval of our actions forms the basis for the existence of our company."

Today, Carpenter remains on Forbes's list of America's largest private companies, with sales of \$2.1 billion, 5,000 employees and 19 foam producing plants.



**2013:**  
61,000 ppm  
cocamide DEA

**2017:**  
no cocamide DEA



**2013:**  
16,000 ppm  
cocamide DEA

**2017:**  
no cocamide DEA

## Safer Shampoos & Shower Gels

Many of us are in intimate contact with shampoos and shower gels almost every day. So many consumers were shocked to learn that they were regularly lathering a cancer causing chemical into their scalps and/or skin. But that's what the Center for Environmental Health discovered in 2013 when we began researching shampoo and shower gel ingredients. Our research identified dozens of companies whose products contained cocamide DEA, a chemical known to cause cancer but widely used as a foaming agent in many products.

Companies using cocamide DEA in 2013 varied from small companies making specialty products to major brands that produced everything from children's products to specialty products. Products with the cancer-causing chemical spanned the range from discount brands to high end luxury products.

CEH reached legal agreements requiring dozens of companies to end the use of cocamide DEA in their products. Here we highlight two of the companies.

Molton Brown is a luxury company, with products sold at Neiman Marcus and other high end retailers. Today, Molton Brown's shower gel is safer, containing no cocamide DEA. The company has revenues of over \$80 million and continues to be successful.

Grisi is a discount shampoo company based in Mexico. The company markets its products to Latino customers at stores like K-Mart. Because of our legal work those shampoos no longer contain cocamide DEA. Eliminating cocamide DEA is an action that Jose Grisi, who founded the company almost 200 years ago would appreciate. He described his company as "natural" and "for the benefit for all."





## Conclusion

Since California voters gave Proposition 65 their strong support in 1986, the law has effectively reduced our exposure to chemicals that cause cancer or reproductive problems like birth defects and infertility. Moreover, the law's success has not imposed undue burdens on business. To the contrary, businesses making safer, more environmentally friendly products are now poised to take advantage of the global demand for such healthier items.

Our report shows that the changes won from Prop 65 protect Americans from harmful chemicals without imposing significant costs on businesses and consumers. Lead-safe, non-vinyl baby bibs and lunchboxes are just as kid-friendly as the pre-Prop 65 lead-tainted vinyl ones were. Lead-free candy and cola without cancer-causing coloring doesn't taste any different or cost any more. Costume jewelry made without lead and cadmium is widely available at low prices, replacing tainted jewelry that posed unnecessary hazards to women and children.

The scope of toxic chemicals reduced or eliminated by Prop 65's influence has been wide – from those found in toys and candy to those found in large industrial facilities. It is fair to say that California is a cleaner and healthier place than it was before passage of the law.

The Center for Environmental Health does not support any proposals which prevent states from using laws like Proposition 65 to protect American families from toxic chemicals. States have been at the forefront of health-protective chemical policy and we need to maintain that power creativity.

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