

Trouble In Toyland

The 23rd Annual Toy Safety Survey

November 2008

TexPIRG Education Fund

Written by Liz Hitchcock, Public Health Advocate and Edmund Mierzwinski, National Consumer Program Director with the TexPIRG Education Fund. Research by Erin Wingo, Administrative Assistant.

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For a copy of this report, visit our website at the following address: TexPIRG.org

More information about toy safety is available at our PIRG toy safety site: www.toysafety.net

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I. Executive Summary

The recall of 45 million toys and other children's products in 2007 and continued recalls in 2008 reminded Americans that no government agency tests toys before they are put on the shelves. Specifically, the wave of recalls focused attention on the fact that the agency charged with protecting Americans from unsafe products—the Consumer Product Safety Commission—is a little agency with a very big job to do. Congress responded by passing the first major overhaul of the CPSC since it was established during the Nixon Administration, when it passed the landmark Consumer Product Safety Improvement Act (CPSIA) in August 2008.¹ In addition to expanding the agency's budget, Congress gave the CPSC more tools to hold corporate wrongdoers accountable and speed recalls, moved toward banning toxic lead and phthalates except in trace amounts and greatly improved import surveillance.

While the new law strengthens the CPSC and contains tough new protections against toxic chemicals like lead and phthalates, these protections have not yet gone into effect. As parents and other toygivers venture into crowded malls this holiday season, they should remain vigilant about often hidden hazards posed by toys on store shelves.

The 2008 Trouble in Toyland report is the 23rd annual Public Interest Research Group (PIRG) survey of toy safety. This report provides safety guidelines for parents when purchasing toys for small children and provides examples of toys currently on store shelves that may pose potential safety hazards. We visited numerous toy stores and other retailers to find potentially dangerous toys and identify trends in toy safety. This year, we focused specifically on toys that contain lead and phthalates in our research.

In the next section, we identify our key findings.

A. Findings:

1. Deaths and Injuries

Choking on small parts, small balls and balloons remains a leading cause of toy-related deaths and injuries. Between 1990 and 2007, at least 190 children died after choking or asphyxiating on a toy or toy part; eight children died in 2007 alone. Since 1979, the CPSC has banned small parts in toys for children under three and 1994 legislation requires an explicit, prominent warning label on toys with small parts for children between the ages of three and six.

2. Toxic Chemicals in Toys

Some toys can pose hidden hazards, exposing children to dangerous and bio-accumulative chemicals linked to reproductive and developmental effects, lowered IQ, other serious health problems or even death.

We found:

LEAD IN TOYS

- Some children's toys and jewelry may contain high levels of lead. In one case, we found a piece of jewelry that contained 45% lead by weight. We also found toys that exceed the new law's lead paint standards, which will ban lead in paint in excess of 90 parts per million once in effect in August 2009.

CPSC has recalled more than 150 million pieces of lead-laden children's jewelry since 2004. In 2007, millions of plastic and wooden toys were also recalled for excessive levels of lead paint. Lead has no business in children's products, whether on paint or coatings or in metal toys, jewelry or other children's products (vinyl bibs, lunchboxes, etc). Under current CPSC regulations, lead paint is banned at levels greater than 600 parts per million (ppm). When lead is otherwise found in jewelry or toys or children's products, however, it can only be determined to be a "banned hazardous substance" subject to recall if the lead is at high enough levels and is also found to be "accessible." The Consumer Product Safety Improvement Act will eventually ban lead except at trace amounts whether in paint or coatings (90 ppm limit as of August 2009) or in any toys, jewelry or other products for use by children under 12 years old (100 ppm limit as of August 2011 after scheduled interim reductions beginning February 2009).

PHthalATES

- This year, we found two toys with phthalate levels that far exceed limits allowed by the new federal law scheduled to take effect in February 2009.

The CPSIA contains a provision that bans toys containing three classes of phthalates for all children, and bans toys containing three more phthalates if they can be put in younger children's mouths. This provision will go into effect in February 2009. CPSC should vigorously enforce the CPSIA's ban on phthalates in toys and other products intended for children and work with the Federal Trade Commission to ensure that toys labeled "phthalate-free" do not contain phthalates.

While the phthalate provisions of the CPSIA are not yet in effect, consumers can take a few simple actions to limit their child's exposure to these and other toxic chemicals. At the store, they should select toys made of materials that are less likely to contain toxic chemicals.

B. Recommendations:

1. For Consumers

Be vigilant this holiday season, and remember:

- The CPSC does not test all toys, and not all toys on store shelves meet CPSC standards.
- There is no comprehensive list of potentially hazardous toys. Examine toys carefully for potential dangers before you make a purchase. Shop with U.S. PIRG's Tips for Toy Safety available at toysafety.net (also summarized in this report).
- Report unsafe toys or toy-related injuries to the CPSC. Call 800-638-2772 or visit www.cpsc.gov.

2. For Policy Makers

The state and federal government must ensure the safety of all products on the market for children. Congress must ensure that the CPSC's increased budget authorizations for the next five fiscal years are fully funded in appropriations, and conduct vigorous oversight of implementation of the new law.

• REFORM CHEMICALS POLICY.

Currently, manufacturers can put chemicals on the market without proving they are safe. Manufacturers should be required to provide all hazard and health-impact information to the state and federal government so agencies can begin to assess the thousands of chemicals currently on the market for which little or inadequate data are available. Next, manufacturers of chemicals should be required to conduct an alternatives analysis, to determine if they really are using the least hazardous chemical for each application.

• PHASE OUT DANGEROUS CHEMICALS.

The federal government must act based on the overwhelming weight of evidence showing that some chemicals might harm human health. Manufacturers should be required to remove chemicals that may pose a particular threat to fetuses, infants, and children, particularly when the chemical is not necessary for the product to function according to design.

• INFORM CONSUMERS ABOUT THE PRESENCE OF DANGEROUS CHEMICALS.

The state and federal government must inform consumers about the presence of dangerous chemicals in products. Manufacturers should be required to label products with the names of these chemicals in order to allow parents to choose less toxic products.

3. For CPSC

CPSC should vigorously enforce the CPSIA ban on phthalates in all toys and products for children twelve years old and under, and in toys for younger children that can be put in a child's mouth.

CPSC must move swiftly to implement all rules required under the new law and must ensure that new third-party testing programs meet the new law's standards. CPSC must also move quickly to implement the new law's publicly-accessible hazards database requirement.

II. Introduction:

A. Wave of Recalled Toys Prompts Product Safety Overhaul

In 2007, child product recalls reached an all time high with 231 recalls of 30 million toys and 15 million other children's products.² Twelve of the recalls involved more than one million units, causing the media to dub 2007 the "Year of the Recall."

Most of the toy recalls were for hazards previously identified in this report—excessive levels of toxic lead, dangerous small magnets, and choking dangers. In the 23 years we have published *Trouble In Toyland*, the Consumer Product Safety Commission has taken action on more than 130 hazards identified in this report.³ Since we released our last report, at least four CPSC recalls were based on PIRG's 2007 *Trouble In Toyland* findings. Over one million toys containing small magnets identified in our 2007 report were recalled in three separate announcements.⁴ In addition, 300,000 toys posing a choking hazard identified in our 2007 report were recalled.⁵

The dramatic wave of toy, food and other consumer product recalls drew intense attention from policymakers to the problems of consumer safety generally and the limits of the long-neglected Consumer Product Safety Commission specifically. The CPSC is the nation's smallest safety agency, yet it is responsible for 15,000 different products—from chain saws to escalators and from kitchen appliances to toys. Its budget for the 2007 fiscal year—before Congress took action to upgrade it – was just under \$63 million, or less than half of what its 1974 startup budget (\$34 million) would be today had it been merely corrected for inflation (\$145 million). In 2007, it had only one toy tester at its decrepit Maryland laboratory; worse, only 15 of 380 total staff (down from a 1980 peak of 978) were on duty full-time as port inspectors.⁶

Popular toy manufacturers, such as Mattel, were forced to recall millions of units due to problems associated with their products' lead paint violations or dangerous small magnets. In 2008, from January to November 5th, 76 toys were recalled. Fully 64 toys or children's products totaling over 6.3 million units have been recalled in that same time for excessive levels of lead paint (47 recalls) or lead in jewelry or children's trinkets (17 recalls). The final recall totals for 2008 may not approach the record set in 2007, but 2008 will be still among the worst years for recalls.

Recalls are a solution of last resort. Once products are in consumers' homes, few will hear about the recall or will be able to take the products out of their homes. The better solution is to ensure that products are safe before they reach our stores and our shores. Fortunately, the Year of the Recall stimulated a long-somnolent Congress into taking a closer look at the neglected Consumer Product Safety Commission. In August 2008, Congress completed critical, overdue action on landmark legislation, resuscitating the agency's ability to protect the public from hazards.

U.S. PIRG and other organizations had long sought to strengthen the CPSC through rulemaking petitions, lawsuits and Congressional efforts. Yet, except for the 1994 passage of the Child Safety Protection Act – which was passed only after a path-breaking Connecticut law led the way – our efforts had largely been in vain. The CPSC had long suffered from Congressional neglect and administration efforts to weaken it (by both the 1980's Reagan administration and this decade's Bush administration.) Those efforts to keep the CPSC small and weak were backed by the Toy Industry Association, the

National Association of Manufacturers, manufacturers of all terrain vehicles (ATVs), and the American Chemistry Council, among others.

B. Neglect and Efforts To Weaken The Agency

Just over one year ago, the CPSC's budget of less than \$63 million was less than half what it would have been (\$145 million) had it simply been updated for inflation since its establishment in 1973. The CPSC staff in 2007, at about 400 FTEs, was again less than half its peak staffing level in 1980. For much of 2007 it operated without a legal quorum; it could conduct voluntary recalls, but do little other business. Yet the tiny agency was and is nonetheless responsible for the safety of over 15,000 separate consumer products, ranging from coffee makers and home appliances to chain saws, escalators and children's products, including toys.

C. The Solution: The Consumer Product Safety Improvement Act of 2008

In response to the Year of the Recall and the unprecedented public outcry it generated, the 110th Congress acted on a bi-partisan basis to first increase the CPSC budget significantly for both the 2008 and 2009 fiscal years while it considered broader reform legislation. Both the House and Senate then developed and passed comprehensive CPSC Reform Act proposals, which were reconciled in a conference committee and signed into law in August by the President. In what most analysts considered a rare consensus on the need for reform, these bills were not weakened every step of the way from introduction through passage, as is the fate of most legislation. While it is common for an introduced bill to be the high water mark with sponsors hoping to hold enough of the bill together to make it worth passing in the end, the opposite occurred in this case, thanks to the broad public support for CPSC reform and the perseverance of Congressional champions.⁷

The Senate bill, in particular, was strengthened on the Senate floor with the addition of a ban on toxic phthalates. In the conference committee, negotiations in most cases resulted in selection of the stronger of the two alternate provisions, not the weaker or a compromise.

D. Consumers Still Must Be Vigilant

While the new law has been enacted, it has not yet fully taken effect. Most of its provisions are subject to rules that are either out for comment or will be out for comment on a rolling basis over the next year. The law's restrictions on toxics will not take effect until February 2009. Similarly, the new third party testing regime established by H.R. 4040 takes effect next year. While larger retailers in particular have increased their testing of toys and put pressure on manufacturers for early compliance, there still could be trouble in toyland this year. Our researchers continue to examine both discount stores and larger stores for non-compliance. We readily found toxic toys on store shelves.

**On the next page is a U.S. PIRG summary of the highlights of the
Consumer Product Safety Improvement Act of 2008.**

HR 4040 became Public Law 110-314 when it was signed by the President on 14 August 2008.

Highlights of the Consumer Product Safety Improvement Act of 2008

<p>MANDATORY STANDARDS for toy and durable nursery (cribs, etc.) products</p>	<p>The new law greatly expands the number of mandatory children’s safety standards enforced by the CPSC by making now-voluntary industry toy (ASTM F-963, which includes magnet safety) and durable nursery product (cribs, etc.) standards into mandatory CPSC standards.</p>
<p>THIRD PARTY TESTING of all children’s toys and products subject to any mandatory standards</p>	<p>The new law prohibits the sale or importation of any toy or children’s product subject to any mandatory CPSC safety standard or rule (including the new standards above) unless it is certified by an approved third-party testing body. (This section is to be implemented on a rolling basis over time. The CPSC enforcement position has long been that products subject to standards can no longer be manufactured after implementation dates, but products in inventory can still be sold. But see lead and phthalates, below, which are subject to a different rule as banned hazardous substances.)</p>
<p>LEAD PAINT BAN strengthened</p>	<p>The maximum allowable amount of lead in paint decreases from the 1977 limit of 600 ppm to 90 ppm one year after enactment (August 2009).</p>
<p>BAN ON LEAD IN TOYS and Children’s Products:</p>	<p>The new law makes lead in children’s products a banned hazardous substance. The lead limits and implementation dates are as follows:</p> <ul style="list-style-type: none"> ▪ 600 parts per million (ppm) after 180 days (February 2009) ▪ 300 ppm after 1 year (August 2009) ▪ 100 ppm after 3 years (August 2011) <p>The 100 ppm standard may be altered by the CPSC if determined not technologically feasible. (As banned hazardous substances, after effective dates, products exceeding these limits can’t be manufactured OR sold and must be removed from shelves.)</p>
<p>BAN ON TOXIC PHTHALATES In Toys and Children’s Products</p>	<ul style="list-style-type: none"> ▪ Childcare products and children’s toys containing the phthalates DEHP, DBP, and BBP in concentrations higher than 0.1% per phthalate (1,000 ppm) are permanently banned. ▪ Childcare products and children’s toys that can be put in a child’s mouth containing the phthalates DINP, DnOP, and DIDP in concentrations higher than 0.1% per phthalate (1,000 ppm) are provisionally banned pending results of a study committee which could rescind the ban. <p>As with lead, products exceeding these standards become banned hazardous substances. After the effective date (February 2009), these products cannot be manufactured OR sold and must be removed from shelves.</p>
<p>PUBLICLY ACCESSIBLE DATABASE of Reported Potential Hazards</p>	<p>Currently, the CPSC only publishes information on products that have already been recalled. Implementation of this new provision, modeled after similar auto and drug safety agency databases of complaints and potential hazards, is subject to funding. Database would include information reported by consumers, first responders and doctors and hospitals, but not by manufacturers.</p>
<p>CPSC FUNDING DOUBLED, Staffing Levels Increased</p>	<p>The last Bush Administration approved CPSC budget was \$63 million for 2007. Subject to Congressional appropriations, the new law reauthorizes the CPSC for 5 fiscal years, with authorizations increasing annually to \$136 million in 2014, with additional targeted funding to refurbish its decrepit labs. The new law also dramatically increases staffing levels, especially for front-line inspection and import safety staff.</p>
<p>PENALTY AUTHORITY and Recall Effectiveness Improved</p>	<p>The new law dramatically increases civil and criminal penalty authority of the CPSC; and it takes numerous steps to improve recall effectiveness, including greater authority against recalcitrant manufacturers and requirements that durable items such as cribs that might be sold and resold have permanent recall information labels.</p>
<p>Other Highlights:</p>	<p>The new law also extends 1994 choke hazard warning labels required on point-of-sale packaging to Internet and catalog sales; allows state Attorneys General to enforce federal laws and retains certain state consumer laws; improves ATV safety; and provides new protections for private sector whistleblowers.</p>


PIRG's TIPS FOR TOY SAFETY Page 1 of 2

While the Consumer Product Safety Improvement Act represents a major step forward in protecting America's littlest consumers from unsafe products, many of its protections are not yet in effect. We caution consumers purchasing products for infants and toddlers to watch out for the following hazards on store shelves.

Choking Hazards

Choking is the most common cause of toy-related deaths. According to U.S. PIRG analysis of Consumer Product Safety Commission (CPSC) data (see Appendix B), at least 33 children choked to death between 2005 and 2007 on balloons, balls, toys, or toy parts.⁸

To avoid choking hazards, do not buy small toys or toys with small parts or small balls or marbles for young children.

Read and heed warning labels	
Toys that pose choking hazards for young children are required by law to be labeled with warnings like this one:	 WARNING: CHOKING HAZARD--Small parts Not for children under 3 yrs.

A toy with this warning should not be given to a child younger than 3 or a child of any age who still puts things in her mouth.

Similar warnings are required to appear on balloons, small balls and marbles or packaging of toys that contain them. Small balls, balloons and pieces of broken balloons are particularly dangerous, as they can completely block a child's airway.

Never give young children small balls or balloons.

Make sure balls for children under 6 years old are more than 1.75 inches in diameter.

Never give latex balloons to children younger than 8 years old. Mylar balloons are a safer alternative.

Be careful to keep toys for older children away from younger children. Small parts or broken small parts pose hazards to any child who still puts things in her mouth.

Strangulation Hazards

Keep mobiles out of the reach of children in cribs and remove them before the baby is five months old or can push herself up.

Remove knobs or beads from cords longer than one foot to prevent the cords from tangling into a dangerous loop.

*YOU CAN DOWNLOAD A FULL COLOR VERSION OF THIS FACT SHEET, WITH PHOTOS, AT THE
PIRG WEBSITE TOYSAFETY.NET **TIPS FOR TOY SAFETY PAGE 1 OF 2***

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Magnetic Toys

Unlike weak “refrigerator magnets,” the new, powerful small magnets used in most magnetic building toys, some toy darts and other toys and magnetic jewelry pose special hazards. The magnets can fall out of small toys and look like shiny candy. If a child swallows more than one magnet, the magnets can attract each other in the body (in stomach and intestines) and cause life-threatening complications.

Keep magnetic toys away from children under six. If a child swallows even one magnet, seek immediate medical attention.

Noise

Children’s ears are sensitive. If a toy seems too loud for your ears, it is probably too loud for a child. Take the batteries out of loud toys or cover the speakers with tape.

Toxic Chemicals In Toys And Children’s Jewelry

Some children’s toys, jewelry and cosmetics may contain toxic chemicals, especially lead and toxic phthalates. While both these hazards will be restricted in children’s products beginning in 2009, watch out for them now and continue to watch out for them in 2009, as older toys may still contain them.

PHTHALATES AND OTHER CHEMICALS

Avoid toys made of PVC plastic; which often contains phthalate softeners. Choose unpainted wooden or cloth toys instead. Read the labels of play cosmetics and avoid products with xylene or toluene or phthalates. All of these pose hazards, especially to developing children’s small bodies.

LEAD

CPSC, PIRG and children’s health groups have found high levels of lead paint on toys, as well as high levels of lead in vinyl lunchboxes and bibs and in children’s or costume jewelry. Children exposed to lead can suffer lower IQ, developmental delays or even death. All lead should be removed from a child’s environment, especially lead jewelry and other toys that can be swallowed.

To screen a piece of jewelry for lead, use a home lead tester available at the hardware store. (*This is a screening method, and should not be relied upon as a definitive test.*) Or simply throw cheap, heavy metal jewelry away. Do not give this type of jewelry to children who put things in their mouths.

YOU CAN DOWNLOAD A FULL COLOR VERSION OF THIS FACT SHEET, WITH PHOTOS, AT THE PIRG WEBSITE TOYSAFETY.NET

III. Lead in Toys and Children's Products

Health officials and children's health advocates have long sought to reduce children's daily exposure to lead, which can stunt mental and physical development. Lead-based paint is a common and long-term concern recently reiterated by the massive recalls of popular toys including Curious George, Thomas the Tank Engine, Dora the Explorer, other Sesame Street characters, and Spongebob Squarepants, to name some of the iconic toys subject to recall in 2007 and 2008.

A. The Dangers of Lead

Exposure to lead can affect almost every organ and system in the human body, especially the central nervous system. Lead is especially toxic to the brains of young children. A child exposed to a single high dose of lead—such as by swallowing a piece of metal jewelry containing lead—can suffer permanent neurological and behavioral damage, blood poisoning, and life-threatening encephalopathy. Exposure to low doses of lead can cause IQ deficits, attention deficit hyperactivity disorder, and deficits in vocabulary, fine motor skills, reaction time, and hand-eye coordination.⁹

Children are more vulnerable to lead exposure than adults, since young children often put their hands and other objects in their mouths; their growing bodies absorb more lead; and children's developing brains and nervous systems are more sensitive to the damaging effects of lead.

Scientists have not identified a "safe" level of lead exposure for children.¹⁰ Research published in the *New England Journal of Medicine* in 2003 showed that children can lose IQ points at levels of lead in blood below the "official" level of concern as defined by the Centers for Disease Control.¹¹

An interim CPSC enforcement policy did not prevent jewelry with dangerous levels of lead from falling through the cracks. In March 2006, CPSC recalled 300,000 Reebok heart-shaped charm bracelets. A four year-old child from Minneapolis died in February 2007 of acute lead poisoning after he swallowed a piece from one of these bracelets.¹² During autopsy, doctors removed the Reebok charm from the boy's stomach and learned that it contained 99% lead by weight.¹³

Since the February 2005 enforcement policy went into effect, CPSC has issued numerous additional recalls affecting millions of pieces of jewelry. In May 2006, for example, CPSC recalled 730,000 metal charms included as a free giveaway in certain Shirley Temple movie DVDs.¹⁴

In 2007, CPSC issued virtually innumerable recalls for excessive lead paint, including, for example, 1.5 million Thomas the Tank Engine toys and parts,¹⁵ 967,000 Sesame Street, Dora the Explorer, and other children's toys,¹⁶ and 250,000 SpongeBob SquarePants toys,¹⁷ among others. Recalls for lead and lead paint continued in 2008. Through November 5, the CPSC had announced 64 excessive lead recalls in 2008 totaling over 6.3 million units. Forty-seven recalls (47) were lead paint violations; 17 recalls were children's jewelry or trinkets. Typical recalls included 67,000 Claire's necklaces, 57,000 Benjamin pendants, and 18,500 RR Donnelley miscellaneous learning toys.¹⁸

B. Federal Standards For Lead

Under the Consumer Product Safety Act, regulations ban paint containing lead in a concentration of greater than 600 parts per million (0.06% by weight).¹⁹ Under the Federal Hazardous Substances Act, CPSC may deem other products, such as articles of metal jewelry, as “hazardous substances” if they contain toxic quantities of lead sufficient to cause substantial illness as a result of reasonably foreseeable handling or use, including ingestion.²⁰ If such jewelry is intended for use by children and the toxic lead content is accessible by a child, it then constitutes a banned hazardous substance under the law.²¹

The Consumer Product Safety Improvement Act of 2008 will ban lead in toys and children’s products on a phase-out schedule outlined below. After the effective dates, these products cannot be manufactured or sold.

August 2009: The maximum allowable amount of lead in paint decreases from **600 ppm to 90 ppm**.
February 2009: Toys and children’s products containing lead in excess of **600 parts per million (ppm)** become banned hazardous substances.
August 2009: Toys and children’s products containing lead in excess of **300 parts per million (ppm)** become banned hazardous substances.
August 2011: Toys and children’s products containing lead in excess of **100 parts per million (ppm)** become banned hazardous substances. This final limit may be altered by the CPSC if it is determined to be technologically infeasible.

C. 2008 Laboratory Test Results: Lead In Children’s Toys And Jewelry

To demonstrate the problem of lead in children’s products, we found and sent to an EPA approved laboratory several toys and pieces of jewelry that could appeal to children. We did not attempt to perform an exhaustive search for children’s products and jewelry containing lead; instead, looking in just a few stores, including major retailers and discount stores, we found 2 pieces of lead-tainted jewelry in violation of current standards and a toy car that violated the new lead paint standard (August 2009). In one case, we found lead at levels far exceeding CPSC’s current 600 parts per million (ppm) action level. A novelty keychain was revealed in testing to be 45% lead by weight (450,000 ppm).

See Appendix A for photos of these lead-laden and other potentially hazardous children’s products. See the Methodology for a description of the testing protocol.

IV. Toxic Phthalates in Products Intended for Small Children

Phthalates are a family of chemicals, including diethyl phthalate (DEP), diethylhexyl phthalate (DEHP), dibutyl phthalate (DBP), butyl benzyl phthalate (BBP), diisodecyl phthalate (DIDP), diisononyl phthalate (DINP), di-n-octyl phthalate (DNOP), and many other distinct types. The polyvinyl chloride (PVC) plastic industry uses large amounts of phthalates as additives to improve the flexibility of its products, including home siding, flooring, furniture, food packaging, toys, clothing, car interiors, and medical equipment, including IV bags. In addition, other manufacturers use phthalates in personal care products such as soap, shampoo, deodorant, hand lotion, nail polish, cosmetics, and perfume, as well as industrial products like solvents, lubricants, glue, paint, sealants, insecticides, detergent, and ink.²²

Phthalates are pervasive in the environment and in human bodies. In 2000, the Centers for Disease Control (CDC) found high levels of phthalates and their transformation products (known as metabolites) in every one of 289 adult Americans tested, including women of childbearing age.²³ A larger CDC study in 2003 again found high levels of phthalates in almost every person tested.²⁴

A. Health Effects of Phthalate Exposure

U.S. EPA studies show that the cumulative impact of different phthalates leads to an exponential increase in associated harm. According to data from the U.S. Centers for Disease Control and Prevention (CDC), levels of phthalates found in humans are higher than levels shown to cause adverse health effects. The data also show phthalate levels are highest in children.

Numerous scientists have documented the potential health effects of exposure to phthalates in the womb or at crucial stages of development, including (but not limited to):

- **Reproductive Defects.** Scientists have demonstrated links between exposure to phthalates in the womb with abnormal genital development in baby boys and disruption in sexual development.²⁵ In October 2005, an independent panel of scientists convened by the National Institute of Environmental Health Sciences and the National Toxicology Program released its review of one type of phthalate, diethylhexyl phthalate (DEHP). The panel confirmed that DEHP poses a risk to reproductive and developmental health.²⁶
- **Premature Delivery.** A study published in November 2003 suggests a link between exposure to phthalates and pre-term birth. The scientists found phthalates and their breakdown products in the blood of newborn infants, with higher levels leading to a higher incidence of premature delivery.²⁷
- **Early Onset Puberty.** One study of girls suggests that phthalates may be playing a role in trends toward earlier sexual maturity.²⁸ Scientists found that levels of DEHP were seven times higher in girls with premature breast development than levels in normal girls.
- **Lower Sperm Counts.** In 2003, Drs. Susan Duty and Russ Hauser of the Harvard School of Public Health published one of the first studies linking phthalate exposure with harm to human reproductive health.²⁹ Men who had monobutyl or monobenzyl phthalate in their urine tended to have lower sperm counts, with the highest concentrations leading to the lowest sperm counts.

B. History of U.S. Inaction on Phthalates Changed In 2008

In 1998, the state PIRGs and several other environmental and consumer groups petitioned the CPSC, asking the agency to ban polyvinyl chloride (PVC) plastic in all toys intended for children under the age of five because of the potential health hazards posed by diisononyl phthalates (DINP). While noting its position that “few if any children are at risk from the chemical,”³⁰ in December 1998 CPSC asked the toy and baby products industry to remove DINP from soft rattles and teethers. About 90 percent of manufacturers indicated at that time that they had or would remove DINP from soft rattles and teethers by early 1999. CPSC staff also asked the industry to find a substitute for phthalates in other products intended for children under three years old that are likely to be mouthed or chewed.³¹

CPSC also convened a Chronic Hazard Advisory Panel to examine the existing scientific data concerning the potential risks of phthalates to humans. In June 2001, the panel concluded that while the majority of children would not be adversely affected by diisononyl phthalate, “there may be a DINP risk for any young children who routinely mouth DINP-plasticized toys for seventy-five minutes per day or more.”³²

Unfortunately, in February 2003, CPSC denied the state PIRGs’ petition to ban PVC plastic in toys for young children.³³

Other countries have taken action, however, to protect children’s health. In September 2004, the European Union (EU) agreed to impose wide restrictions on the use of six phthalates in toys and childcare products.³⁴ The EU banned three phthalates classified as reproductive toxicants – diethylhexyl phthalate (DEHP), butyl benzyl phthalate (BBP), and dibutyl phthalate (DBP) – in all toys and childcare articles. The EU banned three other phthalates – DINP, diisodecyl phthalate (DIDP) and di-n-octyl phthalate (DNOP) – in toys and childcare articles intended for children under three years of age and that can be put in the mouth.³⁵

C. States Act; Congress Follows

In 2007, following a campaign by Environment California, the new home of CALPIRG’s environmental work, California enacted legislation banning phthalates in children’s products.³⁶ In 2008, bills were introduced in eight state legislatures that included bans on phthalates in children’s products; Washington State and Vermont both passed legislation that was enacted in 2008.

In March 2008, Senator Dianne Feinstein (CA) successfully offered an amendment to the U.S. Senate’s Consumer Product Safety Improvement Act that banned phthalates in children’s products. In July, the House/Senate Conference Committee sent a final conference report to the House and Senate that became law. The new law includes a ban on childcare products and children’s toys containing the phthalates DEHP, DBP, and BBP in concentrations higher than 0.1% per phthalate (1,000 ppm), and on childcare products and children’s toys that can be put in a child’s mouth containing the phthalates DINP, DnOP, and DIDP in concentrations higher than 0.1% per phthalate (1,000 ppm). The ban on DINP, DnOP and DIDP is in effect pending a Chronic Hazard Advisory Panel’s report on the health effects of the chemicals. The CHAP has eighteen months to report its findings and make a recommendation on whether to make the ban permanent. Both bans are effective February 2009. The interim ban is only rescinded if the CHAP recommends doing so.

D. 2008 Laboratory Test Results: Phthalates In Children's Toys

This year, we found two toys with phthalate levels that contain levels of phthalates that far exceed limits allowed by the Consumer Product Safety Improvement Act³⁷ scheduled to take effect in February 2009. Laboratory tests found diisononyl phthalate (DINP) at an estimated concentration of 400,000 parts per million (40%) and diisodecyl phthalate (DIDP) at an estimated concentration of 64,000 parts per million (6.4%) in one toy. Another toy was found to have an estimated concentration of 95000 parts per million (9.5%) DINP.

E. More action needed for a toxic-free future for America's kids

The CPSIA's tough new limits on two toxic chemicals --lead and phthalates—represent a big step forward in protecting America's children from toxic chemicals, but these are just two of the many chemicals present in a child's world that can affect her future.

1. Toxic Chemicals Found In Children's Blood At Birth

In a 2005 study by the Environmental Working Group (EWG) in collaboration with Commonweal³⁸, researchers at two major laboratories found an average of 200 industrial chemicals and pollutants in umbilical cord blood from 10 babies born in August and September of 2004 in U.S. hospitals. Tests revealed a total of 287 chemicals in the group. The umbilical cord blood of these 10 newborns, collected by the Red Cross after the cord was cut, contained pesticides, consumer product ingredients, and wastes from burning coal, gasoline, and garbage.

Of the 287 chemicals that were detected in the study, 180 were known carcinogens, 217 were toxic to the brain and nervous system, and 208 cause birth defects or abnormal development in animal tests.

Many people think, incorrectly, that the government would not allow chemicals to enter the market if they were not safe. In truth, the regulatory process has failed to work the way the public believes it should.

2. Toxics In Other Children's Products—Bisphenol A In Baby Bottles

The National Toxicology Project at the U.S. National Institutes of Health (NIH) recently said that current human exposure to the neurotoxin and hormone disruptor bisphenol A (BPA) is of "some concern" for effects on development of the prostate gland and brain and for behavioral effects in fetuses, infants and children, and "concluded that the possibility that BPA may affect human development cannot be dismissed."³⁹ Scientists have linked very low doses of bisphenol-A to cancers, impaired immune function, early onset of puberty, obesity, diabetes, and hyperactivity, among other health problems.

America's children receive doses of bisphenol A along with milk, juice and formula in polycarbonate baby bottles and sippy cups at a time in their development when they are most vulnerable to its effects.

Bisphenol A can leach from plastic containers and cans and into food and beverages, leading to potentially significant human exposures. A recent study released by the U.S. Centers for Disease Control and Prevention (CDC) found that BPA was in the blood of 93 percent of humans they

tested. The median level of BPA found in humans is higher than the level that causes adverse effects in animal studies. BPA raises particularly troubling health questions because it can affect the endocrine system, mimicking the effects of estrogen in the body. Experiments in animals and with human cells strongly suggest exposures typical in the U.S. population may increase susceptibility to breast and prostate cancer, reproductive system abnormalities, and, for exposure in the womb and early childhood, a host of developmental problems. Concerns about early life exposures also extend to early onset of puberty in females, potential prostate problems in males, and obesity. A report published in the Journal of the American Medical Association this year shows that exposure to BPA, even at low levels, may increase a person's risk of heart disease and diabetes.⁴⁰

Last year, U.S. PIRG's partner organization, Environment California, tested five of the most popular baby bottle brands on the market (Avent, Dr. Brown's, Evenflo, Gerber, and Playtex) to determine the amount of leaching from each bottle. Our researchers found that the bottles tested from all five brands leached bisphenol-A at levels found to cause harm in numerous laboratory studies.⁴¹

The current U.S. Environmental Protection Agency daily upper limit for BPA, 50 micrograms per kilogram of body weight, is based on industry-sponsored experiments conducted in the 1980's. Some animal studies show adverse health affects from exposure of only 0.025 micrograms per kilogram of body weight, yet a polycarbonate baby bottle with room temperature water can leach 2 micrograms of BPA per liter. A 3-month-old baby drinking from a polycarbonate bottle may be exposed to as much as 11 micrograms per kilogram of body weight daily.

Aside from polycarbonate plastic bottles, BPA is also a food additive approved by the Food and Drug Administration (FDA), commonly used in the coatings for the inside of food cans. But a recent report by the National Toxicology Program (NTP) questioned previous FDA findings that BPA is safe for such applications. Their report, issued on September 3, 2008, expressed "some concern" based on animal studies that BPA might affect the neurological systems and behavior of infants and children. Among its conclusions, the NTP report states that, "the possibility that human development may be altered by bisphenol-A at current exposure levels cannot be dismissed."⁴²

3. U.S. Toxics Policy Is In Need Of Reform

The U.S. government's regulation of chemicals is based on the premise that chemicals are presumed innocent until they are proven to harm human health.

In 1976, Congress passed the primary law regulating toxic chemicals in the United States, the Toxic Substances Control Act (TSCA), which grandfathered all existing chemicals on the market into use without health-effects testing or analysis. Most of these chemicals emerged in the 1940s and 1950s when few laws governed chemical safety. Today, U.S. EPA reviews new chemicals that come onto the market but does not require full health effects testing for approval. With an estimated 2,000 chemicals introduced each year, EPA approves an average of seven new chemicals each day.⁴³

Throughout its nearly 30-year history, TSCA has rarely been amended, but clearly fails to effectively regulate toxic chemicals. Since the law's inception, U.S. EPA has never used its authority to ban a chemical and has only offered regulations on five different chemicals, including PCBs, which Congress ordered regulated. U.S. EPA's lax regulation can be attributed to the unreasonably high burden of proof the law places on the agency to show that a chemical poses an unreasonable risk to human health and the environment.

TSCA divides all the chemicals on the market into two categories: existing chemicals and new chemicals. Existing chemicals are chemicals already on the market before 1980. These make up approximately 99 percent by volume of the chemicals on the market today. Existing chemicals are considered safe until U.S. EPA can establish that they pose an unreasonable risk to people's health or the environment, that the benefits of action outweigh the risks of inaction, and that U.S. EPA is employing the least burdensome method when taking action.⁴⁴

Companies that wish to introduce new chemicals to the U.S. market must notify U.S. EPA at least 90 days before producing or importing a new chemical. U.S. EPA has been able to ensure review of the new chemicals. The new chemicals program, however, could be improved by increasing the testing requirements of the chemicals.

U.S. EPA should have the authority and means to guarantee chemicals on the market are safe for human health and the environment. In its 1998 review of high production volume chemicals, U.S. EPA estimated the cost for a full round of basic screening tests, including tests for reproductive and developmental toxicity, at about \$205,000 per chemical.⁴⁵ The chemical industry, with profits of \$13.5 billion in 2004, should pay this price to protect both health and the environment.⁴⁶

Methodology

CHOKING HAZARDS:

We categorized toys as a potential choking hazard if a) a toy labeled for children under three contains small parts or breaks easily into small parts;⁴⁷ b) a toy contains small parts or small balls but is intended for children under three, regardless of age labeling if any; c) a toy contains small parts or small balls, is intended for children over three, but lacks the express statutory choke hazard warning, or that choke hazard warning fails to meet the law's prominence and contrasting colors requirements; or d) the toy is intended for children under six, lacks the statutory choke hazard warning and appears to fail the "use and abuse" test, breaking easily into small parts that fit in the choke tube.

TESTING OF PRODUCTS FOR PHTHALATES:

STAT Analysis Corporation in Chicago, a laboratory accredited by the Illinois Environmental Protection Agency in accordance with the National Environmental Laboratory Accreditation Program, performed the phthalates testing. STAT Analysis followed standard procedures, using EPA Method 8270C and EPA Method 3580A.⁴⁸ The reporting/quantitation limits varied based on the product tested.

TESTING OF LEAD-TAINTED TOYS AND JEWELRY:

We purchased several toys and children's jewelry from major retailers and dollar stores and used home lead testers (purchased from www.leadcheck.com) to identify items potentially containing lead. We sent these items to STAT Analysis (see above) for additional testing. STAT Analysis used EPA Method 6020 (Inductively Coupled Plasma-Mass Spectrometry) and EPA Method 3050B (Acid Digestion of Sediments, Sludges, and Soils) to determine the quantity of lead in each item.⁴⁹

Appendix A: Potential Toy Hazards Identified in 2008

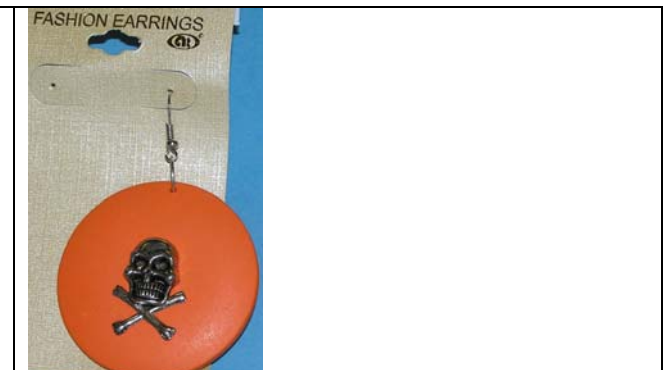
<u>Type of Hazard: Toxic Phthalates</u>	
<u>Silly Fish Squirters</u>	
<u>Made By</u> Toysmith <u>In Country of (if known)</u> China <u>Item # (if known)</u> 1495	
<u>Test Results</u> 6.4% DIDP, 40% DINP	
<u>Potential Hazard Identified:</u> Phthalates found at levels of 64-400 times the amount allowed by the pending February 2009 Consumer Product Safety Improvement Act, which makes certain toys and children's products containing certain phthalates at levels greater than 0.1% banned hazardous substances.	

<u>Type of Hazard: Toxic Phthalates</u>	
<u>Pony Land Scented Pony Pet</u>	
<u>Made By</u> JA-RU, inc <u>In Country of (if known)</u> China <u>Item # (if known)</u> 1212s	
<u>Test Results</u> 9.5% DINP	
<u>Potential Hazard Identified:</u> Phthalate found at levels of 95 times the amount allowed by the pending February 2009 Consumer Product Safety Improvement Act, which makes certain toys and children's products containing certain phthalates at levels greater than 0.1% banned hazardous substances.	

WARNING: There is no comprehensive list of hazardous toys. Simply because a toy does not appear on this list does not mean that it is safe. Under current law, toys must meet standards, but no testing is required.


For this 2008 Trouble In Toyland report, PIRG focused on identifying hazards related to the new law's restrictions on toxic lead and phthalates in toys. Many other toy hazards may exist, including choking on small parts, balls or balloons; ingestion of powerful small magnets; noise and strangulation. See "Tips for Toy Safety" (pages 7-8 in this report) or download a color version at the PIRG website toysafety.net.

<p><u>Type of Hazard: Lead Paint</u></p> <p><u>Red Plastic Super Car</u></p> <p><u>Made By Four Seasons General Merchandise</u></p> <p><u>In Country of (if known) China</u></p> <p><u>Item # (if known) 23976</u></p> <p><u>Test Results</u></p> <p>160 ppm</p>	
<p><u>Potential Hazard Identified:</u> Lead paint found at levels above those allowed by the pending Consumer Product Safety Improvement Act requirements, which bans lead paint at levels in excess of 90 ppm effective August 2009.</p>	

<p><u>Type of Hazard: Lead in Jewelry Metal</u></p> <p><u>Halloween Skull Earring</u></p> <p><u>Made By Fashion Earrings (AT)</u></p> <p><u>In Country of (if known) China</u></p> <p><u>Item # (if known) none</u></p> <p><u>Test Results</u></p> <p>1000 ppm</p>	
<p><u>Potential Hazard Identified:</u> Lead in excess of both current actionable (600 ppm) and February 2009 ban level (600 ppm).</p>	

WARNING: There is no comprehensive list of hazardous toys. Simply because a toy does not appear on this list does not mean that it is safe. Under current law, toys must meet standards, but no testing is required.

For this 2008 Trouble In Toyland report, PIRG focused on identifying hazards related to the new law's restrictions on toxic lead and phthalates in toys. Many other toy hazards may exist, including choking on small parts, balls or balloons; ingestion of powerful small magnets; noise and strangulation. See "Tips for Toy Safety" (pages 7-8 in this report) or download a color version at the PIRG website toysafety.net.

<p><u>Type of Hazard: Lead in Jewelry Metal</u></p> <p><u>Key Chain with locket</u></p> <p><u>Made By unknown</u> <u>In Country of (if known) unknown</u> <u>Item # (if known) none</u></p> <p><u>Test Results</u> 450,000 ppm (45% lead)</p>	
<p><u>Potential Hazard Identified:</u> Lead in excess of both current actionable (600 ppm) and February 2009 ban level (600 ppm).</p>	

<p><u>Type of Hazard: Small Parts/Choking</u></p> <p><u>Littlest Pet Shop</u></p> <p><u>Made By Hasbro</u> <u>In Country of (if known) China</u> <u>Item # (if known) 65428</u></p>	
<p><u>Potential Hazard Identified:</u> Choking hazard; small parts label violation. Label (see yellow circled warning in picture) does not meet the prominence and contrasting type requirements of the Federal Hazardous Substances Act.</p>	

WARNING: There is no comprehensive list of hazardous toys. Simply because a toy does not appear on this list does not mean that it is safe. Under current law, toys must meet standards, but no testing is required.

For this 2008 Trouble In Toyland report, PIRG focused on identifying hazards related to the new law's restrictions on toxic lead and phthalates in toys. Many other toy hazards may exist, including choking on small parts, balls or balloons; ingestion of powerful small magnets; noise and strangulation. See "Tips for Toy Safety" (pages 7-8 in this report) or download a color version at the PIRG website toysafety.net.

Appendix B. Toy-Related Deaths, 1990-2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Choking/Asphyxiation Deaths																			
Balloons	6	3	6	6	6	8	7	6	4	4	1	4	3	3	1	2	3	2	75
Balls	2	2	3	6	4	2	0	3	1	4	2	1	2	5	4	9	4	4	58
Marbles	0	2	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	5
Toy or Toy Part	6	6	1	4	3	1	3	2	3	1	2	4	3	2	2	2	5	2	52
Total	14	13	11	16	13	12	10	11	8	9	6	9	8	10	7	13	12	8	190
																			0
Riding Toys, Scooters	4	8	4	5	4	6	2	0	4	4	8	13	5	0	6	8	10	8	99
																			0
Toy Chests	4	2	2	1	0	0	0	1	0	1	1	1	0	0	0	1	0	0	14
																			0
Strangulation	1	1	3	2	0	1	1	0	0	0	0	1	0	0	2	2	0	0	14
																			0
Other	0	1	2	1	1	2	0	1	2	2	2	1	0	1	1	2	5	2	26
																			0
TOTAL TOY DEATHS	23	25	22	25	18	21	13	13	14	16	17	25	13	11	16	26	27	18	343
% BY CHOKING/ASPHYXIA	61%	52%	50%	64%	72%	57%	77%	85%	57%	56%	35%	36%	62%	91%	44%	50%	44%	44%	55%

Source: U.S. PIRG analysis of annual CPSC Reports on "Toy-Related Deaths and Injuries" ~ CPSC's Calendar 2007 report⁵⁰ released to public on 10 November 2008.

Toy-Related Deaths (Children Under 15): 1990-2007

Endnotes

¹ The Consumer Product Safety Improvement Act of 2008, HR 4040, became Public Law 110-314 on August 14th when it was signed by the President.

² See the report “2007: The Year of the Recall,” Kids In Danger, February 2008, available at http://www.kidsindanger.org/publications/reports/2008_Year_of_the_recall.pdf (last visited 16 July 2008).

³ Due to the current CPSC leadership’s tortured interpretation of Consumer Product Safety Act Section 6(b), a provision of the law requiring manufacturer approval of publicly-released information, it no longer tells us when we have assisted in a recall, or even sends us general information about the results of its analysis of our reports. Since the product has already been the subject of a major publicly-announced report by PIRG, then is the subject of a negotiated voluntary recall with a press release to the media from the CPSC, we find the CPSC’s posture absurd and against the public interest.

⁴ See CPSC Release #08-244, 8 April 2008. “Magnetic Dart Boards Recalled By Henry Gordy Int’l; Ingested Magnets Pose Aspiration and Intestinal Hazards.” That recall was 870,000 units and the toy was featured in the 2007 Trouble In Toyland report. On 22 February 2008, the CPSC recalled 250,000 virtually identical dartboards made by the same manufacturer. See release #08-201 “Family Dollar Recalls Magnetic Dart Boards; Ingested Magnets Pose Aspiration and Intestinal Hazards” Also, on 21 December 2007, the CPSC recalled 2,800 panda magnet toys identified in the 2007 Trouble In Toyland report. See CPSC release # 08-149, “Super Magnet Toys Recalled by MTC Due to Aspiration and Intestinal Hazards.”

⁵ See CPSC release #08-243, 7 April 2008: “Plush Insect Toys Recalled by Dollar Tree Stores Due to Choking Hazard.” This to was identified to the CPSC in our transmittal to them of the 2007 Trouble In Toyland report.

⁶ In 2007, in separate appropriations legislation, the Congress rejected the Bush administration’s proposed fiscal 2008 increase from just under \$63 million to just over \$63 million and substituted an \$80 million appropriation. The CPSC focused the increase on port inspection program upgrades. See the U.S. Consumer Product Safety Commission 2009 Performance Budget Request, available at <http://www.cpsc.gov/CPSCPUB/PUBS/REPORTS/2009plan.pdf> (Note: Because Congress did not complete its 2008 appropriations bills, the CPSC budget is temporarily frozen at that level.

⁷ Key champions (partial list) included Senators Mark Pryor, Daniel Inouye, Dick Durbin, Barbara Boxer and Ted Stevens and Representatives Bobby Rush, John Dingell, Joe Barton and Jan Schakowsky.

⁸ U.S. PIRG analysis of annual CPSC Reports on “Toy-Related Deaths and Injuries,” including “Toy-Related Deaths and Injuries: Calendar Year 2007,” by Risana Chowdhury, Division of Hazard Analysis, approved for public release 10 November 2008.

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¹¹ Richard L. Canfield, Ph.D., Charles R. Henderson, Jr., M.A., Deborah A. Cory-Slechta, Ph.D., Christopher Cox, Ph.D., Todd A. Jusko, B.S., and Bruce P. Lanphear, M.D., M.P.H., “Intellectual Impairment in Children with Blood Lead Concentrations below 10 µg per Deciliter,” New England Journal of Medicine, April 17, 2003, Volume 348:1517-1526.

¹² CPSC, “Reebok Recalls Bracelet Linked to Child’s Lead Poisoning Death,” press release, March 23, 2006. Accessed October 30, 2006 at <http://www.cpsc.gov/cpscpub/prerel/prhtml06/06119.html>.

¹³ Centers for Disease Control, “Death of a Child After Ingestion of a Metallic Charm --- Minnesota, 2006,” Morbidity and Mortality Weekly Report, March 23, 2006.

¹⁴ CPSC, “Metal Charms Sold with Twentieth Century Fox DVDs Recalled for Toxic Lead Hazard,” press release, May 5, 2006.

¹⁵ CPSC release of June 13, 2007, “RC2 Corp. Recalls Various Thomas & Friends™ Wooden Railway Toys Due to Lead Poisoning Hazard,” accessed on November 7, 2007 at <http://www.cpsc.gov/CPSCPUB/PREREL/prhtml07/07212.html>.

¹⁶ CPSC release of August 2, 2007, “Fisher-Price Recalls Licensed Character Toys Due To Lead Poisoning Hazard,” (<http://www.cpsc.gov/cpscpub/prerel/prhtml07/07257.html> last accessed on November 7, 2007).

¹⁷ CPSC release, August 22, 2007, “Martin Designs Inc. Recalls SpongeBob SquarePants Character Address Books and Journals Due to Violation of Lead Paint Standard,” Accessed November 7, 2007 at <http://www.cpsc.gov/cpscpub/prerel/prhtml07/07283.html>.

¹⁸ U.S. PIRG analysis of CPSC recall announcements.

¹⁹ 16 CFR 1303.

²⁰ 15 U.S.C. 1261(f)(1)

²¹ 15 U.S.C. 1261(q)(1)

²² Phthalate Esters Panel of the American Chemistry Council, What are Phthalates?, downloaded from www.phthalates.org on 14 April 2004; Catherine Dorey, Greenpeace, Chemical Legacy: Contamination of the Child, October 2003.

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- ³⁶ News release, October 15, 2007, "Governor Signs Bill to Protect Kids from Toxic Toys," Accessed November 7, 2007 at <http://www.environmentalcalifornia.org/newsroom/environmental-health/environmental-health-news/governor-signs-bill-to-protect-kids-from-toxic-toys>.
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- ⁴⁷ If a toy broke into small parts with little effort or force, we assumed that the toy may not comply with CPSC use and abuse testing procedures.
- ⁴⁸ A technical description of EPA Test Method 8270C is available at U.S. EPA, "Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry, accessed November 7, 2006 at <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/8270c.pdf>. A technical description of EPA Test Method 3580A is available at U.S. EPA, "Waste Dilution," accessed November 7, 2006 at <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/3580a.pdf>.

⁴⁹ A technical description of EPA Test Method 6020 is available at U.S. EPA, “Inductively Coupled Plasma-Mass Spectrometry,” accessed November 3, 2006 at <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/6020.pdf>. A technical description of EPA Test Method 3050B is available at U.S. EPA, “Acid Digestion of Sediments, Sludges, and Soils,” accessed November 3, 2006 at <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/3050b.pdf>.

⁵⁰ U.S. PIRG analysis of annual CPSC Reports on “Toy-Related Deaths and Injuries,” including “Toy-Related Deaths and Injuries: Calendar Year 2007,” by Risana Chowdhury, Division of Hazard Analysis, approved for public release 10 November 2008.