



# STANFORD

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## GRADUATE SCHOOL OF BUSINESS

CASE: GS-63  
DATE: 09/15/08

### UNSAFE FOR CHILDREN: MATTEL'S TOY RECALLS AND SUPPLY CHAIN MANAGEMENT

*We apologize to everyone affected by this recall, especially those who bought the toys in question. We realize that parents trust us with what is most precious to them—their children. And we also recognize that trust is earned.*

—Robert Eckert, CEO of Mattel, Inc.<sup>1</sup>

On August 2, 2007, Mattel announced a voluntary worldwide recall of 83 products in its Fisher-Price toy lines, including characters such as Dora the Explorer, and the Big Bird and Elmo characters from *Sesame Street*. The recall, which applied to approximately 1.5 million toys sold worldwide after May 1, 2007, was due to the use of excessive lead paint.<sup>2</sup> Over the next month, Mattel announced six more recalls that covered toys with lead paint, as well as small magnets that could become loose and be ingested by children. In October, Mattel made yet another recall for lead paint contamination.<sup>3</sup> All of the toys recalled had been manufactured in China. Two weeks after the August 2<sup>nd</sup> recall, the owner of the Chinese factory that had used the lead paint committed suicide.

This series of recalls attracted widespread publicity, as well as political and consumer concerns that sometimes bordered on hysteria. Newspapers and television networks jumped on the story, interviewing concerned shoppers and showing toys being removed from shelves and parents bringing toys to stores for lead testing. Mattel's brand image took a serious beating.

The toy recalls reinforced public concerns raised by several high-profile problems with other Chinese-made products earlier in 2007, including tires, toys, pet food, cough syrup and

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<sup>1</sup> Mattel press release, “Company Recalls Products with Possible Lead Paint Content,” August 2, 2007.

<sup>2</sup> Tracy Quek, “Mattel Recalls 1.5 M Made-in-China Toys,” *The Straits Times*, August 3, 2007; see also: Mattel Product Recall website, <http://service.mattel.com/us/recall.asp> (accessed June 26, 2008).

<sup>3</sup> Mattel Product Recall website, loc. cit.

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David Hoyt prepared this case under the supervision of Professor Hau Lee of the Stanford Graduate School of Business and Professor Mitchell M. Tseng of the Hong Kong University of Science and Technology as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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toothpaste. The continual public drumbeat about “dangerous Chinese-made products” hammered the “Made in China” brand.

Yet, it was inaccurate and overly simplistic to blame the problem solely on irresponsible Chinese manufacturers. In fact, less than 15 percent of the toys recalled by Mattel were due to manufacturing errors (specifically, the use of lead paint). Most of Mattel’s recalled toys were due to defective designs, such as those that allowed small magnets to become dislodged. Most of design have been carried out outside of China.

Understanding the true nature of the problems, and how they could be resolved, required urgent, yet thoughtful efforts on many fronts; by Mattel, by the manufacturers, and by the government agencies of China and toy importing countries.

## MATTEL

Mattel began as a manufacturer of dollhouse furniture in 1945. The company broadened its lineup of toys over the next several years, with sales growing into the millions of dollars. In 1955, Mattel became the first toy company to sponsor a television program, when it used sponsorship of *Mickey Mouse Club* to reach millions of potential customers. The company introduced its most popular product in 1959—the Barbie doll. The doll, which was named for the founder’s daughter, was an immediate success and went on to become the most successful toy brand in history. Mattel went public the following year, and continued to grow, both by developing its own products and by acquisition.<sup>4</sup>

In 2007, at the time of the product recalls, Mattel was the world’s largest toy maker. Many of the most popular brands in the toy business were owned by Mattel, some of which included Barbie and American Girl dolls, Fisher-Price toys, Hot Wheels, and Matchbox cars. In addition to its own brands, Mattel sold products under license based on characters from *Sesame Street*, *Barney*, Walt Disney and Warner Brothers movies, and the Harry Potter books. These and other products drove sales for 2007 to nearly \$6 billion, with after-tax income of \$600 million. (See **Exhibit 1** for Mattel financial information and **Exhibit 2** for company stock prices.)<sup>5</sup>

## TOY PRODUCTION IN CHINA

By the 2000s, China had become the world’s leading producer of toys. In 2007, about 80 percent of the world’s toy production, and nearly 80 percent of toys coming to the U.S. were made in China.<sup>6</sup> Mattel produced about 65 percent of its toys in China.<sup>7</sup> Most Chinese-made toys were produced in more than 5,000 factories owned by various Hong Kong entrepreneurs and located in Guangdong province in southern China.

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<sup>4</sup> Hoover’s Online, March 26, 2008.

<sup>5</sup> Mattel SEC Form 10-K for 2007, pp. 4, 65.

<sup>6</sup> Jane Spencer and Nicholas Casey, “Toy Recall Shows Challenge China Poses to Partners,” *The Wall Street Journal*, August 3, 2007, p. A1; Robin Kwong and Tom Mitchell, “Toymakers Pressed to Sign Pledge on Product Safety,” *The Financial Times*, August 16, 2007, p. 5.

<sup>7</sup> Nicholas Casey, Nicholas Zamiska and Andy Pasztor, “Mattel Seeks to Placate China with Apology,” *The Wall Street Journal*, September 22, 2007, p. A1.

Toy distribution had evolved from specialty retailers to mass market companies such as Wal-Mart. These companies negotiated relentlessly with their suppliers to drive down costs. This, in turn, forced Mattel and other toy makers (as contrasted to manufacturers who did not own brands) to seek the most cost-effective production sources, resulting in the transfer of manufacturing away from the U.S. and other high-cost locations. Mattel had been one of the pioneers in moving manufacturing to China, having begun production there in the 1980s.

## The Mattel Supply Chain

Mattel's China production was not its first experience with manufacturing in Asia. The first Barbie dolls, made in 1959, were produced in Japan. While initial production had been managed by outside vendors, the company became concerned about the possibility of trademark infringement and the production of imitations. To address this concern, Mattel acquired its own production facilities, over which it maintained tight control.

Mattel's products could be viewed as one of two types: core products with highly valued brand names such as Barbie that sold for long periods of time, and non-core products that sold for a relatively short term, such as licensed characters associated with newly released movies. Mattel's basic strategy was to produce core products in factories that it owned, while using local vendors to produce non-core products and to provide added capacity during periods of peak demand. By 2007, about half of Mattel's toy revenues came from core products made in company-owned plants in China. The rest of its Chinese production, primarily non-core licensed products, was contracted to local vendors.<sup>8</sup>

Mattel inspected materials when they came in the factory door. Suppliers were closely monitored for problems such as lead-based paint, and some vendors had been terminated for violations. Mattel developed about 5,000 new toys each year. New toys were first produced in small batches before approval. When full-scale production began, the company would periodically take toys off the production line for inspection.

Mattel contracted with between 30 and 50 other vendors for the portion of production not done in its company-owned factories.<sup>9</sup> In addition to producing non-core products, contract manufacturers helped Mattel address the highly seasonal nature of its business. In this regard, it might outsource components of core products. For instance, it might contract labor-intensive processes such as the fabrication and painting of eye balls for certain dolls.

Due to the long-standing concern about lead, Mattel required that factories in its supply chain use paint and other materials provided by certified suppliers. The company claimed that it did not put undue price pressure on suppliers, particularly as it related to paint. Thomas Debrowski, executive vice president for worldwide operations, stated that "We insist that [our vendors] continue to use certified paint from certified vendors, and we pay for that, and we're perfectly willing to pay for that."<sup>10</sup>

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<sup>8</sup> David Barboza and Louise Story, "Toymaking in China, Mattel's Way," *The New York Times*, July 26, 2007.

<sup>9</sup> Tracy Quek, loc. cit.

<sup>10</sup> Ibid.

Mattel required that its vendors adhere to its corporate safety standards. Mattel allowed companies that it considered to be its most reliable suppliers to do their own routine testing, with Mattel conducting quarterly spot tests.<sup>11</sup>

Complicating the situation, however, was the fact that vendors subcontracted with other suppliers, who might contract with still other suppliers for parts or materials. For instance, a company that was making a doll might subcontract certain processes, such as painting the eyes, to another company. That company might obtain paint from still another supplier. Mattel required vendors to notify the company of any subcontractors, so that Mattel could inspect the subcontractors. It also prohibited subcontractors from using multiple layers of additional suppliers. However, at the time of the recalls, it was not clear how well these rules were being followed. Mattel had 200 employees whose sole responsibility was training and supervising its Chinese contractors, but these employees were based in Hong Kong, not at the toy production facilities.<sup>12</sup>

On July 26, 2007, just days before the first of Mattel's major recalls, the *New York Times* ran a story detailing the company's Chinese manufacturing. The article observed that, "Independent analysts, and even watchdog groups, say Mattel may be the best role model for how to operate prudently in China."<sup>13</sup> The article noted that Mattel had been in China for many years, and that in the 1990s it had been harshly criticized for operating sweatshops in Asia. It had responded by hiring a professor with "an international reputation as a critic of worker mistreatment" to make unannounced inspections and publish his reports without Mattel censorship. He was still inspecting Mattel plants 10 years later, with complete independence in writing and publishing his reports. While these reports were often critical, he concluded that "Mattel is the gold standard."<sup>14</sup>

The *Times* also reported on Mattel's efforts to ensure product safety, reporting that most of the 25 recalls of toys from its Chinese plants and suppliers in the previous 10 years had been due to design problems or customer misuse, not the result of manufacturing errors.

## Pressures on Chinese Toy Manufacturers

As noted, toy companies had moved their production to China primarily as a way to reduce costs. The retail market for toys had consolidated, and the negotiating power of large retailers such as Wal-Mart, Target, and Toys "R" Us increased. These three companies accounted for approximately 41 percent of Mattel's worldwide sales in 2007.<sup>15</sup>

The power of Wal-Mart (known as the "Wal-Mart Effect") was particularly strong. Wal-Mart contracted with more than 5,000 factories in China, directly purchasing \$18 billion worth of goods in 2007. This made Wal-Mart China's eighth-largest trading partner, ahead of even

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<sup>11</sup> Louise Story, "Putting Playthings to the Test," *The New York Times*, August 29, 2007, p. 1.

<sup>12</sup> Ibid.

<sup>13</sup> Barboza and Story, loc. cit.

<sup>14</sup> Ibid.

<sup>15</sup> Mattel 2007 SEC Form 10-K, p. 7.

Russia.<sup>16</sup> Wal-Mart had tremendous negotiating power over its contract manufacturers, as it did over the companies, such as Mattel, that wanted to sell their branded products in its stores.

Mattel and its competitors had to continually reduce prices in order to meet the demands of the big retailers. This put pressure on Mattel's suppliers to continually cut their costs. However, there were also pressures pushing costs higher, and little room for cuts. In 2005, Beijing let its currency float, and by 2007 the yuan had appreciated by more than 9 percent against the dollar. Fuel and raw materials costs had increased. The Chinese government had changed its value-added tax policy, effectively increasing the taxes on some exports by up to 17 percent. Labor costs, traditionally very low, had also been increasing—though no official data was published, annual increases were estimated to be in the range of 10 percent.<sup>17</sup>

Chinese factories responded to this squeeze between lower prices and higher costs as best they could, with varying degrees of success. In this cost-sensitive economic environment, there was little incentive, or ability, for Chinese factories to increase their investments in quality programs or product testing.

One of the problems that the *Times* noted in its September 26 article was that many Western companies relied on testing samples. Once production started, these companies did not test their raw materials, even though suppliers were known to substitute less expensive material. A director of a global risk consulting company observed that “This is very common. The samples you get are always fantastic; but once they rope you in they can cut back. And a lot of Chinese companies will do anything to cut costs.”<sup>18</sup>

## MATTEL'S 2007 RECALL CRISIS

The recalls announced on August 2, 2007 were not the first initiated by Mattel, nor the first highly public recall of Chinese-made products in recent times.

### Recalls of Chinese-Made Products Prior to August 2007

The intense public response to Mattel's recalls occurred against the backdrop of a series of other high-profile recalls of Chinese-made products. In May 2007, 1.5 million Chinese-made Thomas and Friends wooden toy train sets had been recalled by RC2 Corp. due to lead paint. There had been other recent product safety scares. One involved contaminated pet food, in which melamine, a toxic compound causing kidney damage in animals, had been substituted for wheat gluten and rice protein, causing the deaths of pet dogs and cats. Toothpaste contaminated with diethylene glycol was believed to have caused deaths in May 2006, and deaths in Panama were also believed to have been caused by contaminated cough syrups from China. Defective tires had been recalled. In the previous five years, recalls of Chinese-made products shipped to the

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<sup>16</sup> Ryan Finstad, “Total Recall: A Flawed System of Trade,” *Far Eastern Economic Review*, November 2007, pp. 46-51.

<sup>17</sup> Ibid.

<sup>18</sup> Dane Chamorro, regional director of Control Risks, quoted in Barboza and Story, loc. cit.

U.S. had doubled. Of course, an important factor in this increase was the overall increase in imports from China into the U.S.<sup>19</sup>

## Reasons for Toy Recalls

There were several causes for toy recalls, including problems in manufacturing, design, or usage. (See **Exhibit 3** for a list of Mattel recalls from 2000-2007, with the reasons for recall.)

### ***Manufacturing Problems***

One recurrent problem was the use of lead paint. Lead was commonly used in paint until the 1970s. However, it is a neurotoxin, and is particularly harmful to developing brains in young children. Repeated exposure can cause problems ranging from reduction in IQ to serious brain damage. Children frequently chew on toys, ingesting paint, and exposing them to lead. Paint with lead levels exceeding 0.06 percent (600 parts per million) was banned in the U.S. for residential and consumer use (including toys) in 1978.<sup>20</sup> Despite this ban, lead paint remained a recurring problem for toy manufacturers, as paint with lead might cost 30-60 percent less than paint that did not contain lead.

Pigment was a common source of lead in paint. When the toxic effects of lead had become apparent, pigments based on titanium dioxide generally replaced those based on lead. The lead in the paint used in the recalled Chinese toys was due to the use of lead-based pigments.

Lead in Chinese-made products had been a concern for years, and the use of lead paint by Chinese companies had received much attention. Companies manufacturing in China put processes in place in an attempt to prevent the use of lead paint on their products. However, there was evidence that these protections were not fully effective. A study of 38 paint samples from 11 brands, conducted between 2004 and 2007 at the University of Cincinnati, showed that more than 25 percent of paint samples from China had excessive lead levels.<sup>21</sup> There were many possible sources of lead paint, such as the use of unapproved suppliers. Even when companies purchased paint with official lead-free certifications, this was not necessarily a guarantee—suppliers occasionally falsified certification documents.

### ***Design Problems***

A second cause for recall was defects in product design. Product design was not the responsibility of the contract manufacturers, who produced products in accordance with the design specifications provided by the toy makers—companies such as Mattel.<sup>22</sup>

The most prevalent of these in 2007 was the result of increasing use of small, powerful magnets in children's toys. If the designs of these toys were deficient and did not adequately encase the magnets, they could become dislodged and be swallowed by children. This was a relatively

<sup>19</sup> Eric Lipton and David Barboza, "As More Toys Are Recalled, Trail Ends in China," *The New York Times*, June 19, 2007; "Factbook—Recent 'Made in China' Safety Scares and Scandals," Reuters News, August 15, 2007.

<sup>20</sup> 16 Code of Federal Regulations CFR 1303.

<sup>21</sup> Spencer and Casey, op. cit.

<sup>22</sup> In some cases, the brand owner might contract both design and manufacturing, in an Original Design Manufacturer (ODM) agreement, in which case the ODM company would be responsible for design defects. In the Mattel toy recalls, Mattel had designed the products, and contracted solely for their manufacture.

recent problem, as these magnets had not traditionally been used in toys. When a child ingested more than one magnet, the ingested magnets could bind together across intestinal folds, eventually perforating the intestine and causing serious injury or death. The first death attributed to this cause occurred in 2005.

Another danger that warranted recalls resulted from parts that could break off toys and cause choking in infants or small children. Toymakers had to be careful when designing their products to ensure that toys intended for very young children did not have loose small parts, and that any small parts attached to toys (such as noses and eyes on stuffed animals, or buttons) could not be detached.

### ***Product Misuse***

Some recalls were due to the potential for misuse. For instance, Mattel had recalled several products because they had cords that could wrap around a child's neck, or features in which a child's head could get stuck and potentially cause strangulation. These features generally were not a cause for concern if children used the toy in the intended way, but children often found creative ways to play that were not anticipated by the designers. In these cases, if a potential danger was brought to the company's attention, the toy might be subject to recall.

Recalls were usually voluntary, often in consultation between the manufacturer and regulatory agencies such as the U.S. Consumer Product Safety Commission.

### **The August 2007 Recalls**

In early July, 2007, one of Mattel's European retailers discovered excessive lead on some of the company's toys. Mattel stopped production at the factory that made these toys on July 6, and launched an investigation of the problem. On July 26, the same day that the *New York Times* published its article lauding Mattel's Chinese supply chain, the company received data that convinced them that a major recall was necessary.<sup>23</sup>

On August 2, 2007, Mattel announced a voluntary recall of 83 Fisher-Price products sold from May 1 to August 1, 2007. In its press release, the company stated that the recalled items "were produced using a non-approved paint pigment containing lead, which is in violation of applicable standards, as well as our own self-imposed standards." The lead paint was used by a contract manufacturer with whom Mattel had a long-standing relationship, and had previously had a good product safety record.<sup>24</sup>

This recall involved about 1.5 million toys worldwide, 967,000 of which were in the U.S. These included Big Bird and Elmo characters from the *Sesame Street* television show, and toys based on the *Dora the Explorer* character.<sup>25</sup> Two-thirds of the toys were pulled from inventory before they reached retail stores. At the time, the company estimated that the recall would reduce

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<sup>23</sup> Louise Story, "Lead Paint Prompts Mattel to Recall 967,000 Toys," *The New York Times*, August 2, 2007.

<sup>24</sup> Mattel press release, August 2, 2007, loc. cit.

<sup>25</sup> Descriptions and photos of the 82 models recalled in the U.S. are at

[http://service.mattel.com/us/recall/39054\\_IVR.asp?prod=](http://service.mattel.com/us/recall/39054_IVR.asp?prod=) (accessed July 1, 2008).

second quarter earnings by \$30 million, or about 50 percent of the previously expected operating income.<sup>26</sup>

Mattel's chairman and CEO, Robert Eckert issued an apology, saying:

We apologize to everyone affected by this recall, especially those who bought the toys in question. We realize that parents trust us with what is most precious to them—their children. And we also recognize that trust is earned. Our goal is to correct this problem, improve our systems and maintain the trust of the families that have allowed us to be part of their lives by acting responsibly and quickly to address their concerns.<sup>27</sup>

The recall attracted intense worldwide media coverage. The speed and intensity of the international coverage amplified the magnitude of the situation, rapidly escalating to a crisis and then a disaster.

### ***Lee Der Industrial—Mattel's Supplier of the First Recalled Toys***

A week after the recall, it was revealed that Mattel's vendor was a factory in Guangdong province owned by Hong Kong-based Lee Der Industrial Co. Lee Der had been formed in 1993 by Hong Kong entrepreneurs Cheung Shu-hung and Xie Yuguang. By 2007, the company had three factories in the city of Fushan, with annual sales of about \$26 million, according to Xie. The company was the second largest toy maker in Fushan, with employment variously reported to be between 2,500 and 4,000. It was building a new \$5 million factory to provide additional capacity.

Lee Der had manufactured toys for Mattel since the company's founding, beginning with a small batch of educational toys. As Mattel gave Lee Der more orders, the company devoted itself entirely to working for Mattel. The company had established an excellent quality record, and was regarded as one of Mattel's most trusted suppliers.

Cheung was deputy chair of the company, and according to one mid-level manager, "Put his whole life into the toy factory. Pretty much all the money he earned over the years he invested back into the factory." He visited the factory every day, even on weekends. Cheung was also viewed as a good employer, paying substantially above the minimum wage, paying his employees on time, paying overtime, and giving them days off. On hot summer days, he bought iced tea, apples and watermelon for the employees. He loaned money to workers from his own pocket to help them buy homes.

Lee Der's paint supplier since 2002 was Dongxing New Energy, owned by **Cheung**'s best friend. However, Dongxing was not on Mattel's list of eight approved paint suppliers—a fact that Mattel had not noticed. There had been no quality problems, however, until April 2007, when Dongxing ran out of yellow pigment and bought a supply of 200 kilograms from a company they

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<sup>26</sup> Eoin Callan and Geoff Dyer, "China Forced to Defend its Goods After Latest Recall," *The Financial Times*, August 3, 2007, p. 2.

<sup>27</sup> Mattel press release, August 2, 2007, loc. cit.

found over the Internet. This company provided a certificate that the pigment was lead free—a certificate that turned out to be falsified and was not detected by Dongxing.

Lee Der did not test the paint for lead, for reasons that remain unclear. Lee Der reportedly had lead testing equipment in-house, yet did not use it. Dongxing told the media that it decided not to test the paint because sending the paint to outside testing agencies would take too long and hold up production.

One source reported that paint was supposed to be tested five times, beginning with tests by the pigment supplier and paint manufacturer. The tainted paint was not detected by Dongxing, Lee Der, Mattel, or Chinese regulators. However, Lee Der employees suspected something was wrong with the paint—at least one paint sprayer reported that the paint had a different odor.

Mattel did not cancel its contract with Lee Der following the initial recall. Chinese authorities, however, withdrew the company's export license, effectively putting it out of business. Chenug sold enough equipment to pay his workers, and on August 11, he paid salaries to each employee, including a bonus payment. He then hanged himself in the factory with an electrical cord. Lee Der's factories closed, and all employees lost their jobs.<sup>28</sup>

### ***The Second Recall—Early Light Industrial***

On August 14, two weeks after the first recall, Mattel issued a second voluntary recall for toys with excessive lead content. This one involved die-cast toys based on the “Sarge” character in the movie *Cars*. The recall involved 436,000 toys worldwide, 253,000 of which were in the U.S.<sup>29</sup>

This toy was produced by another contract manufacturer, Early Light Industrial. Early Light had been founded in Hong Kong in 1972 by Francis Choi, and had been a long-time supplier to Mattel. By 1983, the company had 9,000 employees, and relocated its factory to Guangdong, reducing payroll by 93 percent. By 2007, Early Light was the largest toy manufacturer, with 80,000 employees. Choi was one of Hong Kong’s richest men, worth about \$1.3 billion, was politically active and well connected. He had extensive real estate holdings in Hong Kong, and large stakes in several prominent Hong Kong companies. He also had extensive personal collections of fishing vessels, race cars, timepieces, and lived in a hilltop mansion in Hong Kong’s New Territories.

Early Light required that its subcontractors purchase paint from the company. In the summer of 2007, employees noticed that a subcontractor had repeatedly failed to pick up the paint it was required to buy. Shortly afterwards, Mattel tested Sarge cars delivered from Early Light, and found traces of lead. Early Light confirmed the tainted paint with its own tests. Mattel then recalled the toys.

<sup>28</sup> Information about Lee Der from: “Toymakers Pressed to Sign Pledge,” loc. cit.; Richard Spenser, “Special Report Inside China’s Toy Factories,” *The Daily Telegraph*, August 22, 2007; Don Lee and Mark Magnier, “Mattel Recall Aftermath: Toy boss Kills Himself,” *The Hamilton Spectator*, August 27, 2007, p. A13; Ji Minhua and Xu Ke, “Death of a Toy-Maker,” *Caijing English Newspaper*, August 20, 2007. Cheung’s name is spelled “Khang” by some sources.

<sup>29</sup> Mattel press release, “One Product Recalled for Impermissible Levels of Lead; November 2006 Magnet Recall Expanded,” August 14, 2007.

Unlike the draconian measures taken against Lee Der, Early Light, with better government connections, managed to keep operating. After the recall, the Early Light factory was showcased in a trade-promotion visit of dignitaries from more than 20 countries. Despite the recall, Early Light's revenue increased by 25 percent in 2007 compared to the previous year. According to Choi, the company had made money every year, with 2007 being its "best ever."<sup>30</sup>

### ***Still More Recalls***

In the same press release as it used to recall the Sarge toy cars, Mattel announced an expansion of an earlier recall due to small magnets. It recalled 18.2 million toys worldwide, 9.5 million of which were in the U.S. These were from 63 toy models that had been sold between January 2002 and January 31, 2007, and included Barbie play sets, Polly Pocket dolls, and Batmobile toys. In January 2007, Mattel had improved the magnet retention design of these products. Mattel had originally decided that no recall of the original design was required, but in August determined that the design used prior to January 2007 was sufficiently suspect that it was appropriate to recall the earlier products.<sup>31</sup>

The August 2007 recalls extended beyond Mattel. On August 22, four other companies announced recalls of Chinese-made products due to lead paint. These included notebooks with lead paint to cover metal bindings, children's jewelry and toys. That same week, Wal-Mart announced that it had found traces of melamine in dog treats, reviving the pet food scare from earlier in the year.<sup>32</sup>

Mattel's investigations of potential safety problems resulted in yet more recalls on September 4, when the company recalled 11 toys, including eight Barbie play sets, due to lead paint. The recall affected 848,000 units worldwide, 530,000 of which were in the U.S. As in the earlier recalls, the toys had been manufactured by contractors, who had subcontracted the painting. The painting subcontractors had used uncertified paint. Mattel prohibited use of two of these three unqualified painting contractors; the third had gone out of business.<sup>33</sup>

### **Mattel's Response**

In the August 14 product recall announcement, Mattel stated that it was improving its process to prevent the use of lead paint. The company's senior vice president of worldwide quality assurance said:

We have immediately implemented a three-point check system: First, we're requiring that only paint from certified suppliers be used and requiring every single batch of paint at every single vendor to be tested. If it doesn't pass, it doesn't get used. Second, we are tightening controls throughout the production

<sup>30</sup> Shu-Ching Jean Chen, "Choi's Toys," *Forbes.com*, January 28, 2008.

(<http://www.forbes.com/business/global/2008/0128/DONOTTOUCH026.html>, accessed August 11, 2008)

<sup>31</sup> Mattel Press Release, August 14, 2007, loc. cit.

<sup>32</sup> Jonathan Birchall, Geoff Dyer and Richard McGregor, "Beijing Blames Mattel for Toys Recall," *The Financial Times*, August 24, 2007, p. 7.

<sup>33</sup> Mattel press release, "Mattel Announces Recall of 11 Toys as a Result of Extensive Ongoing Investigation and Product Testing," September 4, 2007.

process at vendor facilities and increasing unannounced random inspections. Third, we're testing every production run of finished toys to ensure compliance before they reach our customers. We've met with vendors to ensure they understand our tightened procedures and our absolute requirement of strict adherence to them.<sup>34</sup>

The company also reviewed compliance with its rules regarding excessive levels of subcontracting, and notification of the use of subcontractors. In addition, it planned to purchase many portable lead detectors for use in its own factories and those of its suppliers.<sup>35</sup>

At a Senate Appropriations Subcommittee hearing in September, Mattel Chairman and CEO Robert Eckert apologized to Mattel customers for the lead paint recalls, blaming vendors who had not maintained sufficient oversight of their subcontractors rather than any problem specific to China.

On September 21, Debrowski, the head of worldwide operations, made an apology to Li Changjiang, head of the Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIC), the country's top quality control agency. This apology received a great deal of attention. Initially, Debrowski had not intended his conversation with Li to be open to journalists. However, reeling from months of what they considered to be unfair criticism, Chinese officials made attendance by the press a condition of the meeting.<sup>36</sup>

Mattel claimed that Debrowski's apology was simply a repetition of what the company had previously said in other venues—that it was sorry for the recalls, and was doing what it could to prevent problems in the future.<sup>37</sup> However, the apology published in the official Chinese press was phrased as though the company was apologizing for any blame placed on China: "Mattel takes full responsibility for those recalls and I would like to apologize personally to you [Mr. Li], the Chinese people, and all of the customers who received toys." Regardless of the interpretation, Debrowski confirmed that the vast majority of the recalled toys, 17.4 million, had been due to loose magnets, caused by defective designs, while a much smaller number, 2.2 million were related to manufacturing defects (excessive lead). He also stated that the company may have been excessively cautious, recalling even some products that might have met U.S. standards.<sup>38</sup> The admission of design fault was particularly surprising due to Mattel's long history of vigorously defending itself against accusations related to product liability.

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<sup>34</sup> Birchall, Dyer, and McGregor, loc. cit.

<sup>35</sup> Story, loc. cit.; Measuring lead in paint was relatively easy, using a simple hand-held device based on X-ray Florescence (XRF) technology. These devices, which looked like portable bar-code scanners, could measure lead in bulk paint samples, or could examine spots as small as 3mm in diameter on finished products. (For an example of one such product, see [http://www.niton.com/Documents/spec-sheets/7-204\\_0107\\_XLtp-i\\_700\\_Spec\\_Sheet\\_web.pdf](http://www.niton.com/Documents/spec-sheets/7-204_0107_XLtp-i_700_Spec_Sheet_web.pdf), accessed July 28, 2008.) In 2008, these devices cost approximately \$35,000.

<sup>36</sup> "Plenty of Blame to Go Around Chinese Manufacturing," *The Economist*, September 29, 2007, p. 79.

<sup>37</sup> Renae Merle and Yian Mui, "Mattel and China Differ on Apology; Interpretation Sets Off Debate," *The Washington Post*, September 22, 2007, p. D01.

<sup>38</sup> "Mattel Apologizes to China, Pledging to Take Responsibility for Defective Toys," *Xinhua News Agency*, September 21, 2007.

## China's Response

On August 15, the day after the second Mattel recall, the China Chamber of Commerce urged toy manufacturers to sign a public pledge to improve product safety. The group encouraged toy makers to “exercise self discipline,” and not to accept low-priced orders that had ambiguous quality requirements. It also said that they should hire full-time quality inspection staffs, and allow their customers to inspect their plants. It asserted that the recalls were due to “the irresponsible behavior of some individual companies.”<sup>39</sup> As previously noted, AQSIC rapidly moved to withdraw Lee Der’s export permit. However, it took no such action against Early Light Industrial.

China enforced a nation-wide product quality licensing system, requiring official inspections of toys made for export. Companies making toys for export were required to apply for “quality licensing.” The Guangdong Import-Export Inspection and Quarantine Bureau said that it would keep records on potentially dangerous materials and paints in addition to checking finished products.<sup>40</sup>

Chinese officials also launched a public relations offensive. The vice-chairman of the Guangdong Toy Industry Association reported that 300,000 batches of toys were exported from the province in 2006, with only 29 recalls.<sup>41</sup> On August 23, responding to the intense public scrutiny in the wake of the recalls, the Chinese government issued statements blaming the Mattel recalls on changes in international safety standards, rather than a problem with local manufacturers. The vice minister of commerce said, “This had nothing to do with the quality of the origin of the products. But even if only 1 percent of products had quality problems, we will seek to establish the facts and ... punish those companies involved.” Another official said that “hyped” and “untruthful” reports in the public media had damaged China’s image. China also sent back two imports from the U.S., saying that it had found weeds and pesticide residues in soybean shipments, and that a shipment of pacemakers had not met quality standards.<sup>42</sup>

On September 11, regulators from the U.S. and China announced steps to ensure that lead paint would not be used in toys. Under an agreement signed by the U.S. Consumer Product Safety Commission (CPSC) and AQSIC, the use of lead paint in toys was prohibited. The agreement also included plans to improve education of Chinese suppliers about U.S. safety standards, share information between the U.S. and China, and increase inspections in China.<sup>43</sup>

AQSIC imposed a requirement that toy exporters provide results of tests from recognized laboratories with each export shipment. This was a financial burden on the toy factories, which operated on razor-thin margins. The major toy companies that used Chinese contract manufacturers also requested additional tests. These tests created bottlenecks and led to

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<sup>39</sup> Kwong and Mitchell, loc. cit.

<sup>40</sup> Ibid.

<sup>41</sup> Ibid.

<sup>42</sup> Birchall, Dyer, and McGregor, loc. cit.

<sup>43</sup> Christopher Conkey and Nicholas Zamiska, “China to Ban Lead Paint in Toys; Regulators Promise Better Surveillance Following Recalls,” *The Wall Street Journal*, September 12, 2007, p. B5.

shipment delays. Testing companies reported adding shifts to provide capacity for the increased demand for their services.<sup>44</sup>

AQSIC also launched a database to help Chinese companies understand the inspection and quarantine standards of importing countries. It initially covered more than 140 food products. In November, it announced that this database would be expanded to include more than 4,000 items, and put onto the Internet.<sup>45</sup>

One of the challenges facing the Chinese government was that corruption was reported to be widespread. Local governments often protected their local businesses, reportedly even from regulations or pressure from the national authorities. Li Changjiang, the director general of the 30,000-person AQSIC, said that the agency would increase efforts to certify exporters, and to “severely punish and blacklist” companies that failed to meet performance requirements. Li also encouraged the U.S. to refuse imports from companies that were not certified by AQSIC.<sup>46</sup> In Guangdong province alone, the quality control agency had a staff of more than 10,000, and was making a special effort to inspect every manufacturer that held an export license in an attempt to ensure that no substandard products were exported.

In early September, China gave another indication that it was serious about product safety when it appointed Vice Premier Wu Yi to head a high-level team responsible for food, drug, and product safety. Wu was the highest ranking woman in the Chinese Communist Party, and had become known as the person called on to handle the country’s messiest problems. As *Business Week* reported, “[She] is Beijing’s enforcer of last resort. In recent years, she has cleaned up the country’s image after the SARS crisis, overseen the response to the AIDS epidemic, led tough trade negotiations with Washington, and shored up the mainland’s shoddy record on intellectual-property rights.”<sup>47</sup>

The Chinese government also initiated a training program. In October, the Chinese Ministry of Commerce and the AQSIC conducted a two-day training course for 2,600 people from 1,800 factories. As part of this training, quality experts and executives from Mattel and other companies covered issues related to quality, testing, and safety policies in Europe and the U.S. China planned more of these training programs.<sup>48</sup>

By the end of 2007, AQSIC had inspected more than 3,000 toy makers, revoked the permission to export from more than 750 companies and ordered another 690 to modernize their facilities.<sup>49</sup> One official commented that, “Clearing out small and substandard companies helped redirect orders to reliable manufacturers that will pay more attention to improving the quality and safety

<sup>44</sup> John Ruwitch, “China Toy Scare Sparks Safety Testing Frenzy,” *Reuters Health E-Line*, September 26, 2007.

<sup>45</sup> “Overseas Inspection Standards Database Available to Chinese Exporters Next Year,” *Xinhua News Agency*, November 15, 2007.

<sup>46</sup> Conkey and Zamiska, loc. cit.

<sup>47</sup> Dexter Roberts, Chi-Chu Tschang, “Enforcer of Last Resort; Burned by the Product Safety Crisis, Beijing Turns to a Battle-Tested Veteran,” *BusinessWeek*, September 24, 2007, p. 46.

<sup>48</sup> Zhou Ying and Che Xiaohui, “Making Safe, Quality Toys Is No Child’s Play,” *China Daily*, February 21, 2008.

<sup>49</sup> Antony Barton, “Chinese Toy Firms Lose Export Licenses in Safety Crackdown,” *Supply Management*, December 13, 2007, p. 11.

of toys.”<sup>50</sup> Factories that met safety standards reported that their orders had dramatically increased, and that they had ramped up inspections of paint, even from long-term suppliers.

One of the issues facing China was that most of its toy factories operated without brand identity and managed anonymously, producing products for their customers’ brands. As noted earlier, they sustained themselves on small margins. They were at high risk, as the loss of one production contract or a reduction in order volume would have a serious impact on their viability. This contrasted to the Japanese and Korean models, in which exporters developed and grew their own brands, and thus had strong incentives to protect those brands. In the wake of the toy recall crisis, the Guangdong government took steps to help companies innovate and create their own designs, and assist local manufacturers in building their own brands.

## Political and Regulatory Responses

On August 28, a U.S. Senate committee launched an investigation into safety standards for children’s clothing and toys. The Appropriations Subcommittee held a hearing on September 12, in which it called Mattel Chairman and CEO Robert Eckert to testify. The committee had harsh criticism for both Mattel and China. When Eckert testified that “We make sure we enforce our own standards” regardless of where toys are manufactured, Sen. Sam Brownback (R-Kan) replied, “It didn’t work.” He then noted that Mattel had recalled more than 21 million Chinese-made toys in the previous weeks. Brownback expanded his criticism of China beyond the problems with toys, showing a chart with the number of recalls of consumer products in the U.S. by country of manufacture. Since December 2006, the chart showed 177 recalls of Chinese-made products; the next highest was Taiwan with 12, followed by 5 recalls for Mexican-made products. Brownback claimed that, “Made in China has become a warning label.”<sup>51</sup>

Sen. Hillary Clinton (D-NY), then the front-runner for the Democratic presidential nomination, also levied harsh criticism of China’s manufacturers. The Chinese government responded, calling her remarks “slander.” Clinton continued her criticism, noting that the Chinese government had revoked the licenses of hundreds of toy companies for quality control problems, and ordered hundreds more to improve, “even as it asserted that 99 percent of toy exports met quality standards.” She continued, pointing to previously published problems with China’s domestic supply, saying that, “The Chinese government’s watchdog agency reported earlier this year that 20 percent of the toys made and sold in China pose safety risks. That is unacceptable.”<sup>52</sup>

Fueling the fire further, Sen. Barack Obama (D-IL), who was fighting Clinton for the presidential nomination at the time, promised to ban Chinese toys unless their safety could be ensured by government inspectors in China and the U.S.<sup>53</sup>

<sup>50</sup> Zhou and Che, loc. cit.

<sup>51</sup> Bob Dart, “Mattel CEO Defends Toy Manufacturing Operations in China,” *Cox News Service*, September 14, 2007.

<sup>52</sup> “Clinton Blasts China’s ‘Slander’ Charge on Toy Issue,” *Dow Jones International News*, November 23, 2007. Clinton’s comment about 20 percent of toys posing safety risks referred to toys sold within China. These typically had lower safety standards than exported toys.

<sup>53</sup> Christopher Cooper and Nicholas Casey, “Democrats Zero In on Chinese Toys,” *The Wall Street Journal*, December 21, 2007, p. B2.

The CPSC was charged with the responsibility for protecting the public from being harmed by the 15,000 types of consumer products under its jurisdiction. However, the agency was woefully understaffed. Its number of employees had fallen by nearly 60 percent since 1980, to just 401 in September 2007. One person at the CPSC was responsible for testing all toys.<sup>54</sup> Despite pressure from the Congress, the head of the CPSC, Nancy Nord, an appointee of President George W. Bush, "has stood firm against proposed legislation seeking to increase the agency's authority and staff and the maximum penalties for safety violations."<sup>55</sup> This position was based on the Bush administration's general opposition to regulation.

Outside the U.S., the European Union also threatened to ban toy imports from China, citing concerns over safety. It required that China submit a report on its progress by November, at which time it would decide whether or not to impose a ban.<sup>56</sup>

## Consumer Reaction

Consumers reacted strongly to the Mattel recalls. Already stunned by the pet food, tire, and other problems earlier in the year, recalls of large numbers of toys elicited a strong, emotional response. The Made in China brand suffered a serious blow in consumer confidence. In late August, an Associated Press-Ipsos poll surveyed American consumers about their perceptions of the safety of Chinese products. It found that 57 percent were either "not too confident" or "not confident at all." Consumers found fault with both the U.S. government and Chinese manufacturers. An equal number said that the government was not doing enough to ensure safety (65 percent) as blamed Chinese manufacturers (64 percent).<sup>57</sup>

In the immediate aftermath of the firestorm of public attention, some retailers in the U.S. and elsewhere began promoting food and other products that were "China free." However, the intense attention and reaction passed after a few months.

## Financial Cost to Mattel

Mattel took a charge to its earnings of \$68.4 million in 2007 based on its estimate of product-related costs associated with its recalls that year. The vast majority, \$60.9 million, was for product returns and redemptions. In addition, the company estimated that it had incurred incremental costs for legal fees, advertisements, and administration related to the recalls that totaled \$42 million. Thus, it estimated the total cost to its 2007 financial results at about \$110 million.<sup>58</sup> Despite these costs, Mattel reported net income after tax of \$600 million for 2007, a slight increase over the previous year's profit.

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<sup>54</sup> Dart, loc. cit. Number of products under CPSC jurisdiction from CPSC website: <http://www.cpsc.gov/about/about.html> (accessed July 2, 2008).

<sup>55</sup> "US Lawmakers Unveil Plans to Regulate Toys Made in China," *Dow Jones International News*, October 31, 2007.

<sup>56</sup> "China Makes 'Quantum Leap' To Avoid Toy Ban," *Reuters News*, November 20, 2007.

<sup>57</sup> Ken DeWoskin, "The 'Made in China' Stigma Shock," *Far Eastern Economic Review*, September 2007.

<sup>58</sup> Mattel SEC Form 10-K for 2007, p. 80.

Following the recalls, 22 lawsuits were filed against Mattel, all but one of which was a class action suit. Many of these lawsuits charged that Mattel failed to prevent lead paint contamination, and misled the public into thinking that its products were safe. Those related to the magnets charged that the products were defective. The suits asked that Mattel pay restitution or reimbursement, and set up a fund to pay for medical monitoring and treatment of children. They also requested punitive damages. Additionally, some of the cases asked for increased product testing in China, or certification that products were lead-free.<sup>59</sup>

## CONCLUSION

The recalls in 2007 had created serious problems for Mattel and for manufacturers in China. Consumers and importing country governments had responded strongly. Mattel's reputation had suffered. China's export manufacturing sector, a vital engine driving country's economic growth, had been stung by a series of highly visible problems, of which the Mattel recalls were but the latest. Despite the fact that most of Mattel's recalled units were not the result of poor manufacturing, the Made in China brand nevertheless had taken a beating.

Yet, Mattel and the rest of the toy industry depended on China for low-cost production. It would have to regain the trust of its customers. China's factories would also have to prove that they could produce products to the quality and safety standards expected by the rest of the world.

## STUDY QUESTIONS

1. Why do companies outsource?
2. What were the primary causes of Mattel's recall problems? Were these the result of outsourcing?
3. What actions were taken by the principals in the case to address the recall problems? Were these the right actions? Why, or why not?
4. What should Mattel do now? What should governments do?
5. How can accountability be better managed in long, global supply chains?

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<sup>59</sup> Ibid, p. 100.

**Exhibit 1**  
**Mattel Financial Data****Consolidated Statement of Operations**

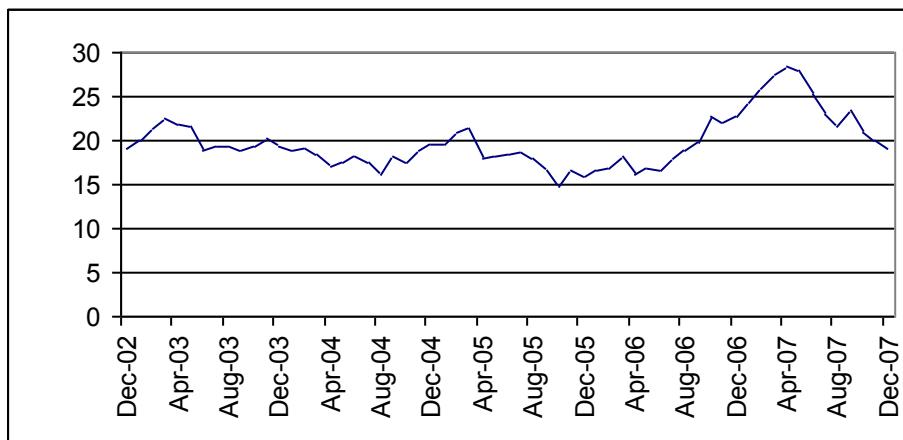
In \$1,000s, except for per share amounts.

	<b>2007</b>	<b>2006</b>	<b>2005</b>
<b>Net Sales</b>	5,970,090	5,650,156	5,179,016
Cost of Sales	3,192,790	3,038,363	2,806,148
<b>Gross Profit</b>	<u>2,777,300</u>	<u>2,611,793</u>	<u>2,372,868</u>
Advertising and promotion expenses	708,768	650,975	629,115
Other selling and administrative exp.	1,338,454	1,232,000	1,079,224
<b>Operating Income</b>	<u>730,078</u>	<u>728,818</u>	<u>664,529</u>
Interest and other (net)	26,680	45,062	12,480
Income before Income Taxes	703,398	683,756	652,049
Provision for Income Taxes	103,405	90,829	235,030
<b>Net Income</b>	<b><u>599,993</u></b>	<b><u>592,927</u></b>	<b><u>417,019</u></b>
<b>Net Income Per Share – Basic</b>	<b>1.56</b>	<b>1.55</b>	<b>1.02</b>
<b>Net Income Per Share – Diluted</b>	<b>1.54</b>	<b>1.53</b>	<b>1.01</b>
<b>Dividends Per Common Share</b>	<b>0.75</b>	<b>0.65</b>	<b>0.50</b>

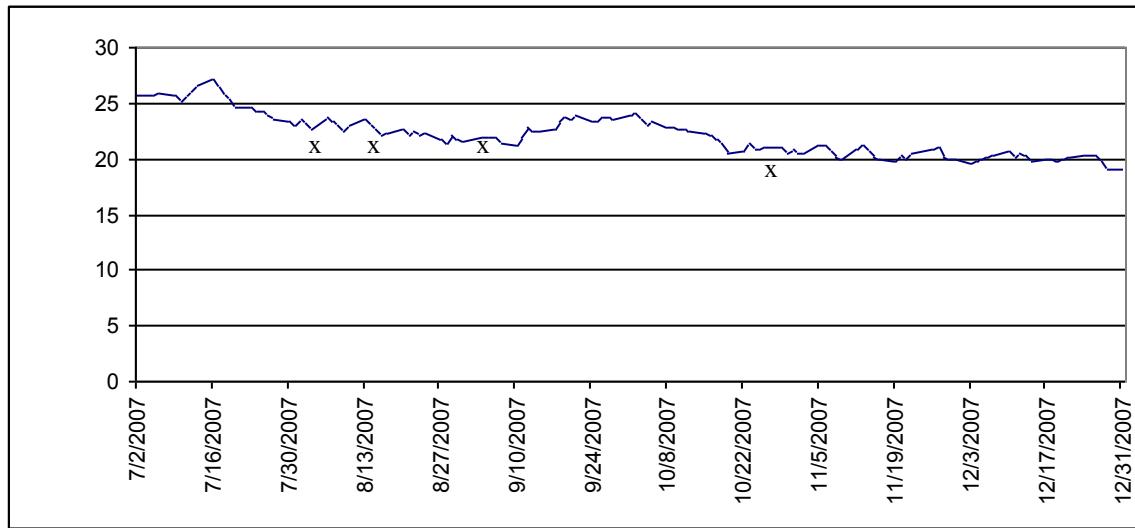
Source: Statement of Operations from Mattel SEC Form 10-K for 2007, p. 65.

## Exhibit 2 Mattel Stock Price Information

Mattel month end closing stock price, December 2002 to December 2007.



Mattel daily closing stock prices, July 2, 2007 to December 31, 2007.



Mattel recalls are denoted with “x”.

**Exhibit 3**  
**Mattel Recalls in the U.S. and Canada, 2000 to 2007**

Mattel made the following voluntary recalls in the United States and Canada from 2000 to 2007. Number of models and units shown are for the United States.

Date	Product	Source	Reason
11/06/2007	Laugh and Learn™ 2-in-1 Learning Kitchen (2 models, 155,000 units)	Mexico	Choking hazard (parts can break off)
10/25/2007	Go Diego Go!™ Animal Rescue Boat (1 model, 38,000 units in US)	China	Lead paint
9/4/2007	Barbie® Accessory Sets (7 models, 675,000 units)	China	Lead paint
9/4/2007	GeoTrax™ Engine (2 models, 90,000 units)	China	Lead Paint
9/4/2007	It's a Big Big World™ (1 model, 8,900 units)	China	Lead Paint
8/14/2007	Mattel Batman™ and One Piece™ Playsets (70 models, 345,000 units)	China	Loose, small magnets
8/14/2007	Barbie and Tanner™ play sets (2 models, 683,000 units)	China	Loose, small magnets
8/14/2007	Pixar Cars Sarge (85models, 253,000 units)	China	Lead paint
8/1/2007	Fisher-Price Toys (82 models, 967,000 units)	China	Lead paint
5/30/2007	Rainforest™ Open Top Swing (1 model, 112,000 units)	China	Infants can become entrapped
2/15/2007	Laugh & Learn™ Learning Bunny (5 models, 500,000 units)	China	Choking hazard (parts can break off)
11/20/2006	Polly Pocket!™ (8 models)	N/A	N/A
1/18/2006	Laugh & Learn™ Musical Chair (2 models, 614 units)	China	Strangulation hazard
6/14/2005	Power Wheels Lightning PAC™ Tire (1 model, 29,000 units)	China	Tire rupture if overinflated
6/14/2005	Power Wheels MX3 Mini Bike Tire (1 model, 5,000 units)	China	Tire rupture if overinflated
5/10/2005	Gro-To-Pro® Pogo Sticks (2 models, 154,000 units)	China	Internal pin can wear, causing malfunction and injury
5/10/2005	Lil' Wagster Dragster™ push toy (1 model, 54,000 units)	Mexico	Design problem. Risk of injury to mouth.
4/14/2004	Batman™ Batmobile™ Vehicle (1 model, 314,000 units)	China	Puncture hazard
11/13/2003	Power Wheels MX3 Mini Bike (2 models, 55,000 units)	China	Motor control circuit malfunction

11/13/2003	Power Wheels Lightning scooter (1 model, 30,000 units)	China	Motor control circuit malfunction
6/19/2003	Sparkling Symphony™ Mobile (1 model, 233,000 units)	China	Potential battery leakage
4/23/2003	Little People® Animal Sounds Farm™ (2 models, 67,000 units)	N/A	Choking hazard (screws can come off)
4/10/2002	Smart Response™ Swing (3 models, 42,000 units)	N/A	Potential injury due to mis-assembly
7/31/2001	Bassinet (3 models, 569,000 units)	N/A	Pinched fingers
7/31/2001	Grow to Pro® Basketball (1 model, 55,000 units)	USA	Strangulation hazard
3/29/2001	Intelli-Table (1 model, 20,000 units in US)	China	Choking hazard (parts can break off)
8/31/2001	Power Wheels® Harley-Davidson® Motorcycle (3 models, 218,000 units)	N/A	Can stick in "on" position
8/23/2000	Get Up and Go Walker (1 model, 246,000 units)	N/A	Can tip, causing children to fall
8/23/2000	Lock & Lift Swing (5 models, 2,500,000 units)	N/A	Children can fall out, resulting in injury
7/21/2000	Big Action™ Construction (1 model, 276,000 unis)	N/A	Strangulation hazard
7/21/2000	Hop Skip Jumper (2 models, 882,000 units)	N/A	Spring can break, causing baby to fall
4/7/2000	3-in-1 Cradle Swing (2 models, 305,000 units)	N/A	Can release, causing infant to fall
4/7/2000	Bounce 'n Play Activity Dome™ (1 model, 235,000 units)	N/A	Suffocation hazard

All trademarks indicated by ® and ™ are owned by Mattel, its subsidiaries, except for Harley-Davidson®, which is owned by Harley-Davidson.

Source: Mattel Product Recall web page (<http://service.mattel.com/us/recall.asp>, accessed June 26, 2008); Unit number and reason for recall are from U.S. Consumer Product Safety Commission recall statements for each recall.