Assignment: Failed Products-Product Failure

Submitted by: Danica Marie A. Dumalagan
Date Submitted: April 14, 2023

Pfizer's Bextra Recall – 2005

Bextra was an anti-inflammatory drug that was voluntarily withdrawn from the market in 2005 due to an increased risk of heart attack and stroke. It is estimated that Bextra caused more than 1,000 deaths and thousands of injuries. The design risk in Pfizer's Bextra was due to its mechanism of action, which inhibits an enzyme that protects the cardiovascular system. The drug was marketed aggressively without adequate warnings about the risks of cardiovascular events, leading to significant harm to consumers. The reliability and safety issues were also significant, as the drug's risks were known to Pfizer before launch but were not adequately communicated to healthcare providers and patients. This failure to prioritize safety and transparency led to significant economic impact, with estimated costs of $1.8 billion.

Johnson & Johnson's Tylenol – 1982

In 1982, seven people in Chicago died after taking Extra Strength Tylenol capsules that had been laced with cyanide. The product was immediately recalled, leading to a loss of $100 million in sales for Johnson & Johnson. The design risk in Johnson & Johnson's Tylenol was due to the product's packaging, which allowed tampering. This design flaw led to the tampering of capsules with cyanide, resulting in several deaths. The reliability and safety issues were also significant, as the product's safety was compromised by the tampering, leading to significant harm to consumers. Johnson & Johnson took swift action to recall the product and introduce tamper-proof packaging, prioritizing consumer safety and mitigating economic impact.

Johnson & Johnson's DePuy Hip Replacement – 2010

In 2010, Johnson & Johnson's subsidiary DePuy Orthopaedics issued a worldwide recall of its metal-on-metal hip replacement products after reports of high failure rates and complications. It is estimated that more than 93,000 patients worldwide were affected by the recall. The design risk in Johnson & Johnson's DePuy hip replacement was due to the metal-on-metal design, which caused the release of metal debris into the body, leading to inflammation, tissue damage, and bone loss. The product was marketed without adequate clinical testing and without warning about the risks of the metal-on-metal design, leading to significant harm to consumers. The reliability and safety issues were also significant, as the product's high failure rates and complications resulted in a worldwide recall and estimated costs of $4 billion.

Vioxx Causing Cardiac Events – 2004

Vioxx was a pain reliever developed by Merck & Co. and was withdrawn from the market in 2004 due to an increased risk of heart attacks and strokes. By that point, 20 million Americans had already taken the drug. Later research estimated that 140,000 Americans had heart attacks from taking Vioxx, resulting in 88,000 deaths. The design risk in Merck & Co.'s Vioxx was due to the drug's mechanism of action, which inhibited an enzyme that protects the cardiovascular system. The risks of cardiovascular events were known to Merck & Co. before launch but were not adequately communicated to healthcare providers and patients, leading to significant harm to consumers. The reliability and safety issues were also significant, as the product's risks were known before launch but were not adequately addressed. This failure to prioritize safety and transparency led to significant economic impact, with estimated costs of $4.85 billion.

Mattel Toys Coated in Toxic Lead Paint – 2007

Back in 2007, Mattel and Fisher-Price recalled Barbie playsets, Dora the Explorer figurines, and other toys due to a lead poisoning hazard. The report by the U.S. Consumer Product Safety Commission said the toys used paint that contained excessive levels of lead, which is toxic when ingested, especially in young children. Luckily, no reported injuries occurred at the time of the recall. The design risk in Mattel's toys was due to outsourcing the manufacturing process to factories in China that did not adhere to strict safety standards. The lead paint used in the manufacturing process was cheaper but not safe for children, leading to significant harm to consumers. The reliability and safety issues were also significant, as the products were not adequately tested and inspected before launch. This failure to prioritize safety and oversight led to significant economic impact, with estimated costs of $110 million.

References

D. Burrows, “10 biggest product recalls of all time,” *Kiplinger.com*, 26-Mar-2018. [Online]. Available: https://www.kiplinger.com/slideshow/investing/t052-s000-10-biggest-product-recalls-of-all-time/index.html. [Accessed: 14-Apr-2023].

E. Lyle Long, “8 most notorious defective products in recent history [U.S. edition],” *Long, Jean & Wechsler, P.A.*, 31-Mar-2023. [Online]. Available: https://ljwlegal.com/notorious-defective-products/. [Accessed: 14-Apr-2023].