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Staff Research Report



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Chinese Product Safety: A Persistent Challenge to U.S. Regulators and Importers

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Executive Summary

Chinese consumer exports to the United States continue to pose a product safety risk. Although Chinese safety regulations have improved in recent years, gaps remain in China's safety regulations for some exports to the United States. Additionally, the sheer volume of imports from China magnifies the impact of product safety scandals when they occur and tests the inspection capacity of U.S. safety agencies. Today, China is the largest foreign supplier of consumer goods to the United States. At the same time, Chinese products account for a disproportionate number of U.S. recalls. In 2014 Chinese goods constituted 23 percent of all goods in the United States under the U.S. Consumer Product Safety Commission's (CPSC) jurisdiction, but represented 51 percent of all product safety recalls posted by the CPSC. Since 2012 Chinese products have accounted for the majority of all CPSC-posted safety recalls.

Case studies presented in this report reveal several safety challenges associated with Chinese products and firms:

- The ability of Chinese manufacturers to rapidly export large quantities of new products can outpace U.S. safety standard setters, resulting in imports of risky products. In 2015, 4.5 million Chinese hoverboards entered the United States before safety standards could be drafted for these products. Many of these hoverboards caught fire resulting in millions of dollars of property damage.
- Suing Chinese firms over faulty products is challenging because they often refuse to acknowledge the jurisdiction of U.S. courts. Taishan Gypsum, a Chinese firm associated with tainted drywall sold in the United States, refused to participate in court proceedings against it until a U.S. judge prevented it from conducting business in the United States.
- At least \$80 million worth of Chinese honey has been illegally shipped through third-party countries to
 avoid antidumping duties. This transshipment makes it difficult to identify Chinese honey, which has been
 known to contain lead and unlawful antibiotics.
- Chinese firms have arbitrarily changed their product designs without notifying U.S. retailers, which can cause high-risk products to circulate widely in the U.S. marketplace absent vigilant importer monitoring and reporting. In 2007, 255,000 Chinese tires were recalled due to a safety defect after being sold to U.S. consumers for at least two years.
- Gaps in China's safety regulatory structure have led to unsafe products. In 2006 and 2007, weak Chinese
 safety rules allowed melamine-laced pet food exports to enter the United States, which were associated
 with the deaths of at least 4,150 pets.
- A weak Chinese regulatory structure was also blamed for the proliferation of Chinese toys containing high levels of lead in 2007. Following the recall of 17 million contaminated toys, the CPSC adopted a proactive, risk-based approach to screening imports but significant gaps remain.
- Private U.S. investigators and media have played a role in highlighting risky Chinese products. In 2015, concerns over formaldehyde in Chinese flooring uncovered by private investigators and broadcaster CBS resulted in the removal of affected flooring from U.S. stores.

U.S. regulators have limited resources to inspect imports for safety lapses. The CPSC currently has enough personnel to regularly staff only 5 percent of U.S. points of entry, and has not been able to inspect all shipments identified as "high risk" by its import targeting methodology. Quick action to respond to product safety threats may also be jeopardized by the CPSC's inability to share or receive nonpublic information from foreign regulatory agencies due to limits imposed by U.S. law.

Due to the effective legal immunity held by some Chinese producers, U.S. importers have a responsibility to be aware of the risks associated with sourcing products in China and to take active steps to ensure the safety of the Chinese products they import into the U.S. market. On occasion, Chinese suppliers have cut corners in production to save costs, supplying U.S. importers with defective goods. In the absence of vigilant importer monitoring, these faulty products can enter U.S. markets, raising safety risks and leaving U.S. retailers responsible for recall and replacement costs.

Overview

China's share of imported goods used by U.S. consumers has increased over time. As seen in Figure 1, in 2015 the United States imported \$397 billion worth of consumer goods, food, and automobiles from China, a 57 percent increase from 2006. China is the largest supplier of consumer goods to the United States, contributing 49 percent of all imports under the CPSC's supervision in 2015 (\$372 billion of \$754 billion total consumer product imports), which makes monitoring shipments from China for safety defects imperative. According to the CPSC, imported goods in general are less likely to comply with U.S. safety requirements than U.S. domestic products. In 2013, more than 80 percent of all CPSC recalls involved an imported product.

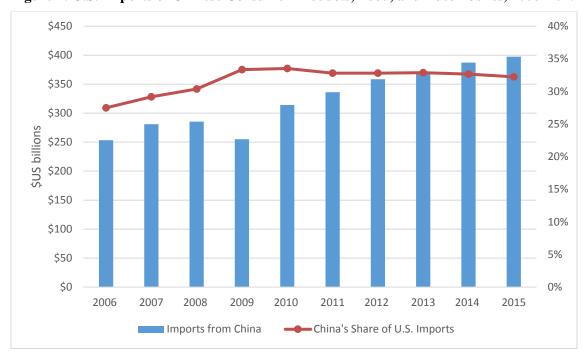


Figure 1: U.S. Imports of Chinese Consumer Products, Food, and Automobiles, 2006–2015

Source: U.S. Department of Commerce, International Data. https://www.bea.gov/iTable/bp_download_modern.cfm?pid=11; Richard O'Brien, Director of International Programs, Consumer Product Safety Commission, interview with Commission staff, February 1, 2017.

Chinese goods represent a disproportionate share of product recalls in the United States and import refusals for safety reasons. For example, in 2014 China accounted for 23 percent of all goods—foreign and domestic—in the United States under the CPSC's jurisdiction, but Chinese goods represented 51 percent of all CPSC-posted recall issuances* of imported and domestic products (see Figure 2).³ By contrast, Mexican products—which account for roughly 5 percent of all U.S. consumer goods—represented only 4 percent of CPSC recalls.⁴ On a dollar-for-dollar basis, imports of Chinese consumer goods produced nearly three times as many CPSC recalls as Mexican consumer imports in 2015.⁵ Similarly, Chinese food imports also constitute a disproportionate share of U.S. Food and Drug Administration (FDA) import refusals. In 2015, China accounted for 4.6 percent of U.S. imports of human and animal food products, but 9.6 percent of all food imports denied entrance to the United States by the FDA originated in China (925 out of 9,635 import refusals).⁶ Although many Chinese product recalls are due to dangerous manufacturing practices, some are also due to design defects created by U.S. firms. For example, while 17 million children's toys were recalled due to the use of lead paint by Chinese manufacturers in 2007, that same year U.S. retailer Mattel recalled 18 million toys assembled in China because a magnet it designed into its toys could be harmful if swallowed.⁷

^{*} Issuances refers to individual recalls issued for defective products. For example, if a company issued a recall for 20,000 defective toaster ovens, that recall would count as one issuance.

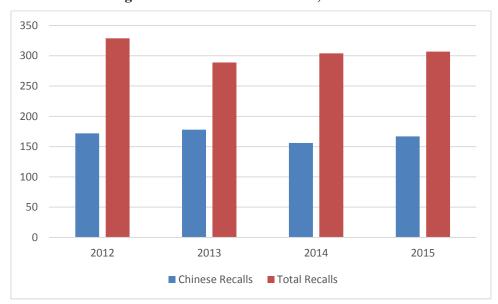


Figure 2: CPSC Recall Issuances, 2012–2015

Source: U.S. Consumer Product Safety Commission, Recall Listing. https://www.cpsc.gov/Recalls.

Safety Checks for Imported Goods from China

A product entering the United States is subject to several safety checks. For Chinese food products, the first step occurs within China. Under Chinese food safety law, all producers of Chinese food exports must set up safety and hygiene control systems meant to ensure the production and storage of food is in compliance with the legal requirements of the destination country. Additionally, before a Chinese food product can be exported, it is subject to entry-exit inspection by China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ). China also maintains an export catalogue of nonfood products that must undergo testing before leaving the country. Under this system, Chinese exports must comply with the safety standards of their destination country. Uniquely, China used to monitor a large number of products through its catalogue, but over time the number of monitored products has decreased as China transitions more toward monitoring production through inspections and formally promoting best manufacturing practices and supply chain management.

Once a product arrives at the U.S. border, responsibility for safety inspections varies among U.S. agencies according to their jurisdiction. As seen in Table 1, while several U.S. agencies play a role in ensuring the safety of imported products, most products fall under the scrutiny of either the CPSC or the FDA. Both agencies oversee an immense flow of products into and within the United States. The FDA estimates all products under its purview constitute roughly 20 percent of the U.S. economy, and in 2015 \$754 billion worth of imported products at 327 U.S. ports fell under the CPSC's jurisdiction. ¹²

Table 1: Product Safety Roles of U.S. Agencies

U.S. Agency	Product Safety Responsibilities
U.S. Consumer Product Safety Commission	Most consumer products
U.S. Food and Drug Administration	Most foods, seafood, animal foods, cosmetics, drugs, medical devices, biologics, tobacco, radiation-emitting devices
U.S. Department of Agriculture	Meat, poultry, catfish, egg products
U.S. National Highway Traffic Safety Administration	Automobiles, motorcycles, trucks, tires
Environmental Protection Agency	Pesticides, fungicides

Source: U.S. Consumer Product Safety Commission, Products under the Jurisdiction of Other Federal Agencies. https://www.cpsc.gov/Regulations-Laws--Standards/Products-Outside-CPSCs-Jurisdiction/.

Given the vast number of imported products that fall under the CPSC's and FDA's purview, both agencies use a risk-based approach for examining imported goods. When a ship containing imported products enters a U.S. port, a customs broker files entry documentation with U.S. Customs and Border Protection (CBP). CBP sends this information—which includes the type of product being imported and the identities of the shipper, importer, manufacturer, and other parties associated with the importer—to the CPSC, FDA, or the appropriate agency for review. The reviewing agencies then apply methodologies that estimate potential safety risks associated with the shipment based on the received information. These methodologies take into account several variables and may address issues such as the type of product being imported, the compliance history of firms associated with the import, whether the importer has historically imported the type of product in question, and other data.

If the methodology or screening indicates that a shipment has a higher risk of containing noncompliant products, the CPSC or FDA may deploy onsite inspectors to examine the imported product. ¹⁶ If the product is found to contain a defect, fails to comply with a technical regulation or ban, or creates an unreasonable risk of injury or death, the CPSC may stop the shipment and prevent it from entering the country. ¹⁷ Similarly, if after examination or sampling the FDA determines a product appears to be adulterated or misbranded, the FDA may refuse entry for the product. A refused shipment must either be destroyed or exported to another country where it will be compliant with local safety guidelines within 90 days of the refusal. ¹⁸

Once an imported product is in the United States, both the FDA and CPSC continue to monitor for product safety and have recall mechanisms to remove unsafe products from the market. For example, the CPSC inspects both physical retail spaces and online marketplaces to ensure sold products do not possess defects, and both agencies respond to reports of unsafe products from U.S. consumers and retailers. The agencies have several tools available to them beyond a recall to promote product safety. The FDA can issue an import alert that allows FDA field staff to detain products without physical inspection due to risks posed by the identity of the importer, the type of product, and the country of origin, among other factors. The CPSC can issue injunctions to deny an importer general access to the United States; however, doing so requires winning a case in court, as does demanding refunds or replacement of defective products.

Despite the administrative tools available to the FDA and CPSC, both agencies must apply limited staff resources against a wide mandate. The CPSC currently lacks sufficient staff to inspect imported products at all U.S. ports. While the total number of CPSC import surveillance employees has increased over time (see Figure 3), the CPSC only has enough import surveillance inspectors to regularly staff less than 5 percent of U.S. ports of entry.²³ As the CPSC has acknowledged in a third-party review of its import surveillance program, the agency has been unable to inspect every shipment identified by its methodology as "high risk," enabling some to enter the United States

^{*} Once goods are detained, the importer is given an opportunity to provide evidence that the shipment is not in violation of FDA standards. Alexandra Heard, Congressional Affairs Specialist, U.S. Food and Drug Administration, interview with Commission staff, September 28, 2016.

uninspected.²⁴ The FDA has comparatively more staff with 190 employees stationed at 37 ports and 457 employees overall devoted to import safety.²⁵ The FDA also notes that due to differences in trade volumes, ports have differing needs for full-time staffing and that some reviews of imports occur at district offices removed from ports of entry.²⁶

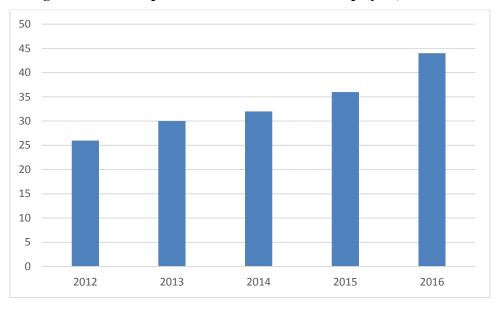


Figure 3: CPSC Import Surveillance Full-Time Employees, 2012–2016

Source: U.S. Consumer Product Safety Commission, 2016 Performance Budget Request to Congress, February 2, 2015, 24. https://www.cpsc.gov/s3fs-public/pdfs/blk_pdf_FY2016BudgettoCongress.pdf; U.S. Consumer Product Safety Commission, 2014 Performance Budget Request to Congress, April 10, 2013, 24. https://www.cpsc.gov/s3fs-public/pdfs/blk_pdf_2014BudgettoCongress.pdf.

The risk assessment methodologies used by both the CPSC and FDA lack product specificity. Both systems examine imports based on their harmonized tariff schedule codes, which can be quite general.²⁷ This may lead to false positives in inspection.* For its part, the FDA supplements this information through mandatory FDA product codes that add a degree of specificity in assessing product risks.²⁸ These methodologies are a proactive way to utilize the FDA's and CPSC's scarce resources. However, some safety advocates worry that if these methodologies primarily target products and shippers with known safety risks, it may divert attention away from new and emerging risks of which the agencies are unaware.²⁹

Limitations of U.S.-China Product Safety Coordination

While the CPSC maintains a dialogue with its Chinese government counterparts, in practice a U.S. statutory requirement effectively blocks it from sharing and receiving nonpublic information from other governments through information-sharing memoranda. Under the Consumer Product Safety Improvement Act, when the CPSC first responds to a product safety concern, the agency is legally forbidden from publicly releasing information that would identify the company involved with the product safety incident. This information remains confidential until the CPSC undertakes several statutorily required steps to release it. 10

^{*} The harmonized tariff schedule groups similar products together for the purposes of applying customs duties on imports. This grouping can be broad, resulting in over-selection of imports for inspection. For example, if the CPSC wanted to monitor imports of high-heel shoes, it would likely screen for harmonized schedule codes 64.03 and 64.02, which consist of all shoes with soles and uppers made of leather, plastics, or rubber, a broad category that includes sports footwear, ski boots, hiking boots, flats, dress shoes, and men's shoes in addition to high heels. World Customs Organization, "HS Nomenclature 2017 Edition."

http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2017-edition/hs-nomenclature-2017-edition assix

[†] The CPSC is required to give businesses time to designate information involved in a product safety incident as proprietary before publicly sharing information and must also give businesses a chance to comment on any information that would identify them before it is released. While this information is protected it is regarded as nonpublic.

Sharing of this sort of nonpublic information between product safety agencies is handled through memoranda of understanding; however, to date the CPSC has been unable to sign any confidential information-sharing memoranda with foreign agencies.³² Under U.S. law, the CPSC cannot sign any memoranda that allows foreign regulators to share confidential product safety information with their legislatures, courts, sister agencies, or provincial safety regulators.³³ At the same time, U.S. law requires the CPSC to share confidential information it receives from foreign agencies with Congress and U.S. courts.³⁴ The mismatch between the limits the CPSC imposes on foreign agencies and its domestic disclosure requirements has prevented the CPSC from signing reciprocal memoranda with foreign agencies and sharing information as foreign agencies find U.S. disclosure limits unworkable. In particular, Chinese product safety regulators have stated that they require reciprocity in information sharing, making an agreement between the CPSC and the Chinese government nonviable.³⁵

Without the ability to share or receive information from foreign governments, the CPSC loses valuable time in responding to product safety incidents. For example, the EU could discover a defect in an imported Chinese product, but would be unable to share this information with the CPSC until this information was publicly disclosed. In the meantime, this product may enter the United States, endangering U.S. consumers. Similarly, if the CPSC discovers a problem with a Chinese import, it cannot share this information with the Chinese government until it clears its public release process. This prevents the Chinese government from quickly taking steps to correct the problem domestically before the product is exported to the U.S. market.

Both the FDA and CPSC maintain offices in Beijing. These offices primarily help the Chinese government and Chinese suppliers understand U.S. safety requirements and maintain a relationship between U.S. and Chinese regulators. While U.S. staff can visit the facilities of Chinese exporters, given the sheer number of Chinese suppliers it is not practical to rely on Chinese site visits to ensure compliance with U.S. safety standards. For example, almost 27,000 FDA-registered food suppliers are located in China; however, the FDA has only 23 personnel in China and in 2016 conducted only 107 inspections of Chinese facilities. While the number of food inspections conducted by FDA staff in China has increased as seen in Figure 4, the FDA can only inspect a small percentage of facilities in China and relies primarily on U.S.-based screening to ensure food safety. Starting in 2013, FDA staff faced delays in acquiring Chinese visas, pushing back planned staffing increases by at least two years. For the CPSC, China is the United States' top supplier of consumer goods, providing \$372 billion worth of products under the CPSC's purview in 2015. The CPSC has acknowledged the importance of China by creating its first and only regional office in Beijing, but that office only has two staff members.

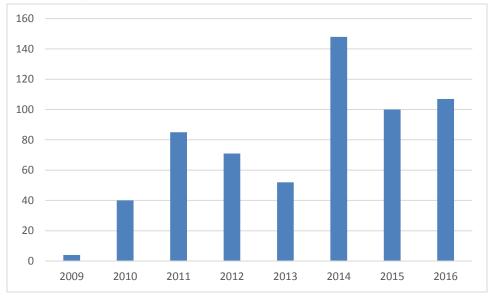


Figure 4: FDA Inspections of Chinese Food Production Facilities, 2008–2016 (Fiscal Year)

Source: Alexandra Heard, Congressional Affairs Specialist, U.S. Food and Drug Administration, interview with Commission staff, February 28, 2017.

U.S. safety agencies use their Beijing offices to educate Chinese manufacturers and officials on how to maintain compliance with U.S. standards. Even with their limited resources, U.S. agencies have reached a significant number of foreign businesses and officials. For example, despite having only one foreign office—located in Beijing—the CPSC has trained 7,200 Chinese and other foreign regulators and manufacturers since 2011.⁴¹

Safety Challenges Posed by Chinese Products

Chinese imports pose several unique safety problems to U.S. regulators and consumers. The sheer quantity of Chinese exports to the United States makes ensuring product safety difficult, and the rapidity with which Chinese manufacturers can make new products challenges U.S. regulators to quickly adopt new standards. Chinese firms have also successfully blocked litigation in U.S. courts, and the absence of effective Chinese safety regulations on certain products facilitates the delivery of unsafe imports into the United States. The following case studies explore the safety challenges associated with Chinese products, along with developments in U.S. and Chinese product safety procedures.

Setting Standards for New Products: Hoverboards

A new product can spread widely in the United States before U.S. standard setters have a chance to provide safety guidance to protect consumers. This occurred briefly with Chinese hoverboards, a type of self-balancing two-wheeled skateboard. Between December 2015 and February 2016 the CPSC received 52 reports of hoverboards catching fire, resulting in more than \$2 million in damage, "including the destruction of two homes and an automobile." The fires were widespread, affecting U.S. consumers in 24 different states. 43

Many of these hoverboards were assembled from parts sourced from multiple factories in China, mostly in the industrial center of Shenzhen. 44 Despite the hoverboards being a new product, hundreds of Chinese factories rapidly transitioned to manufacturing them for export. 45 The first hoverboard patent was filed in February 2013 in the United States, and by one account the first hoverboard was marketed in China at a trade show in August 2014. 46 By 2015 an estimated 1,000 Chinese factories were manufacturing hoverboards, 4.5 million of which were exported to the United States that year. 47

The speed with which these products entered wide-scale circulation threatened to outpace the development of applicable safety standards. Under U.S. law, the CPSC is required to use voluntary safety standards in most circumstances, and these voluntary standards are typically drafted by third-party standard-setting organizations.* At times, setting effective standards can take several years.† Without an effective safety standard, sellers, importers, and manufacturers lack clear guidelines to avert product safety risks.

In the case of hoverboards, the CPSC and standard setters worked quickly to draft an appropriate standard, and online vendors rapidly removed hoverboards associated with safety hazards in the interim. As hoverboards entered the U.S. market, defects in components resulted in several fires. In November 2015, a house in Louisiana burned down after a hoverboard ignited. Within a month, Amazon pulled a number of hoverboard models from its marketplace and instructed hoverboard manufacturers to demonstrate that their products fulfilled existing safety standards for batteries and chargers. By February 2016, UL—a U.S.-based standard-setting organization—announced it had developed a preliminary standard for hoverboards and would accept certification for hoverboard providers. A few days later, the CPSC strongly urged importers to comply with this new standard, issuing a letter stating that noncompliant hoverboards would be considered defective and may be subject to detention or seizure as they entered the United States. While safety issues associated with hoverboards continued—more than 500,000

^{*} The CPSC must defer to a voluntary safety standard if that standard eliminates or adequately reduces safety risks and is likely to be widely obeyed. Certain goods, such as children's products, require mandatory standards. Government Accountability Office, Consumer Product Safety Commission: Challenges and Options for Responding to New and Emerging Risks, October 2014. http://www.gao.gov/assets/670/666488.pdf.

[†] For example, according to the Government Accountability Office, the CPSC worked with consumer groups and the window-dressing industry from 1994 to 2014 to develop standards to address strangulation risks associated with window cords, but did not develop a standard that adequately addressed safety risks over this 20-year period. United States Government Accountability Office, Consumer Product Safety Commission: Challenges and Options for Responding to New and Emerging Risks, October, 2014, 11. http://www.gao.gov/assets/670/666488.pdf.

hoverboards were recalled in July 2016 over fire concerns—importers received an applicable safety standard shortly after reports of defective hoverboards first emerged.⁵² In the meantime, Chinese hoverboard manufacturing appears to have declined. In Shenzhen, one manufacturer reported that his orders fell by 50 percent following Amazon's safety requirements and cut his staff by 80 percent following the downturn.⁵³

Product safety issues and intellectual property (IP) rights often coincide—faulty products can result from copycat manufacturers; enforcement of IP rights can screen out these faulty products. The hoverboard market in particular has been subject to many patent battles. In September 2014, U.S. vehicle manufacturer Segway filed a patent complaint against Chinese hoverboard manufacturer Ninebot. ⁵⁴ By March 2016, the International Trade Commission acted on this complaint by issuing a general exclusion order for imports of hoverboards that infringed on Segway's patent, effectively banning them from the country. ⁵⁵ However, by then Ninebot had bought Segway and its IP rights. ⁵⁶ As a result, Ninebot became the only producer allowed to sell to the United States hoverboards using Segway's patent.

Transshipping and Mislabeling: Honey

Transshipping and mislabeling of Chinese imports to the United States can complicate U.S. product safety agencies' efforts to keep out dangerous products. This is particularly true of products such as honey, for which the country of origin can be easily obscured. Since 2001, the Department of Commerce has applied antidumping duties of up to 184 percent on Chinese honey exports to the United States.* ⁵⁷ Consequently, Chinese honey producers are strongly incentivized to ship their honey to a third-party country, relabel their honey as originating from that third-party country, and then export it to the United States.

The scale of Chinese honey transshipped through third-party countries is difficult to estimate, although an analysis by consumer media publisher Food Safety News suggested that in 2010, one-third of all honey consumed in the United States was smuggled from China through another country.⁵⁸ For more than 20 years, imports of Chinese honey into the United States faced restrictions. In 1995 a suspension agreement was enacted that required China to restrict the volume and prices of honey imports to the United States.⁵⁹ As seen in Figures 5 and 6, while Chinese honey imports to the United States have gradually declined, both in terms of volume and share of total U.S. honey imports, imports from India, Malaysia, and Vietnam (countries where industry experts say transshipping of Chinese honey occurs) have increased dramatically following the imposition of duties on Chinese honey in 2001.⁶⁰ In some cases the increases in honey exports to the United States from these third-party countries exceed that country's domestic honey production, revealing a gap that is likely filled by transshipped Chinese honey. For example, the American Honey Producers Association estimates that Malaysia can produce roughly 45,000 pounds of honey per year. 61 However, since 2001 Malaysia has exported up to 37 million pounds of honey to the United States annually, more than 800 times Malaysia's estimated capacity, according to the American Honey Producers Association's estimates. 62 Similarly, a paper by a Malaysian academic calculated that in 2007 Malaysia's honey exports were 24 times greater than its domestic honey production and only 58 percent of the honey it imported was consumed by domestic buyers.⁶³

The value of the duty placed on Chinese honey has varied over time. When the duty was first enacted in 2001, Chinese honey was subject to duties ranging from 26 percent to 183 percent depending on where in China the honey was produced. Most recently, in 2015 the duty was revised to \$2.63 per kilogram for firms operating across all of China (a margin of roughly 16 percent at current prices). U.S. Department of Commerce, Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Honey from the People's Republic of China, December 10, 2001. http://enforcement.trade.gov/frn/2001/0112frn/01-30468.txt; International Trade Administration, Honey from the People's Republic of China: Final Results of Antidumping Duty Administrative Review; 2012-2013, May 14, 2015. https://www.federalregister.gov/documents/2015/05/14/2015-11577/honey-from-the-peoples-republic-of-china-final-results-of-antidumping-duty-administrative-review; National Honey Board, "Unit Honey Prices by Month—Retail." https://www.honey.com/honey-industry/honey-industry-statistics/unit-honey-prices-by-month-retail/.

\$160 \$140 \$120 \$100 US\$ millions \$80 \$60 \$40 \$20 \$0 2002 2003 2004 2005 2006 2007 2008 -India Argentina Malaysia

Figure 5: U.S. Honey Imports, 1992–2015

Source: U.S. Census Bureau, USA Trade Online. http://usatrade.census.gov/Perspective60.

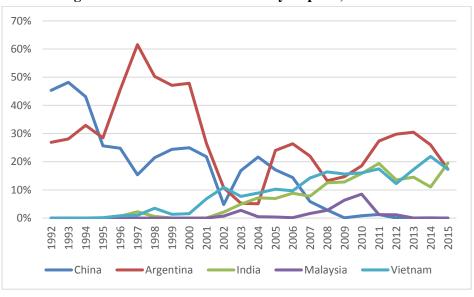


Figure 6: Share of Total U.S. Honey Imports, 1992–2015

Source: U.S. Census Bureau, USA Trade Online. http://usatrade.census.gov/Perspective60.

U.S. border agencies have brought charges against companies transshipping Chinese honey and have seized large quantities of transshipped Chinese honey at U.S. ports of entry. In 2010, ten German nationals were convicted of illegally shipping \$80 million worth of Chinese honey to the United States through countries such as India, Malaysia, and Russia.⁶⁴ In 2013, the Department of Justice brought charges against a U.S. firm that assisted in this transshipment, resulting in several convictions and a \$2 million fine for evading \$180 million worth of tariffs on Chinese honey.⁶⁵ Taken together, these two investigations constituted the largest food fraud case in U.S. history.⁶⁶ In 2016, U.S. Department of Homeland Security agents detained 60 tons of Chinese honey that were transshipped through Vietnam.⁶⁷ Although these seizures are large in scale, food safety and industry experts contend they constitute only a small portion of Chinese honey illegally entering the United States.⁶⁸

Transshipped Chinese honey carries both safety and duty-evasion costs. According to True Source Honey, a honey industry advocacy organization, the United States loses roughly \$100 million a year in uncollected duties due to transshipped honey.⁶⁹ With respect to safety, Chinese honey has been known to contain both lead and antibiotics banned for food use in the United States. Small-scale Chinese honey producers reportedly store their honey in lead-soldered drums, resulting in contamination.⁷⁰ In India, a country thought to account for a significant proportion of transshipped honey, the Indian Export Inspection Council found that 23 percent of sampled outbound honey contained lead and at least two antibiotics.⁷¹ In 2010, concerns over lead and antibiotics in transshipped Chinese honey caused the EU to ban honey imported from India, as it contained contaminants and lacked paperwork showing it was not from China.⁷² The FDA has issued import alerts against 12 Chinese honey and syrup firms for producing honey containing unlawful antibiotics, and has instructed U.S. agents to detain shipments associated with these firms at the border without inspection for potential refusal.⁷³ As seen in Figure 7, China accounts for the most firms subject to honey-related import alerts of any country, followed by Malaysia, Vietnam, and India.⁷⁴

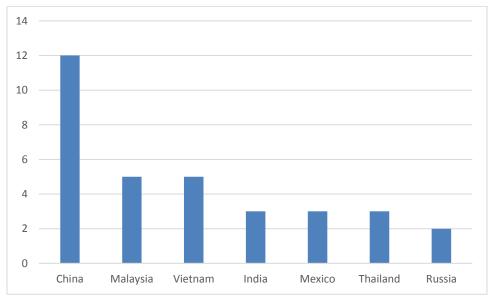


Figure 7: Firms Subject to FDA Antibiotic Honey-Related Imports Alerts by Country, 2009–2016

Source: U.S. Food and Drug Administration, Import Alert 36-04, July 7, 2016. http://www.accessdata.fda.gov/cms_ia/importalert_111.html.

Identifying transshipped Chinese honey is difficult. Labs can attempt to determine the country of origin for honey by testing its pollen. However, Chinese honey launderers can ultrafilter their honey, which removes most chemical traces of the honey's origin. Then, once the honey has been sent to a third country it can be mixed with domestic honey, which further masks the honey's country of origin by infusing it with third-party country pollen. Industry advocates and U.S. senators have urged the FDA to adopt a standard for honey that may address some concerns regarding honey transshipment.⁷⁵ A honey standard that excludes ultrafiltered or mixed honey, for example, would make it easier to detect the country of origin for honey shipments and for the FDA to use its regulatory tools to target Chinese honey. Congress has passed legislation urging the FDA to develop a standard for honey; however, thus far the FDA has only issued nonbinding guidelines.⁷⁶ Currently, testing for honey's country of origin is conducted in a single lab run by CBP.⁷⁷

Barriers to Legal Action: Drywall

Seeking legal redress from Chinese companies that ship unsafe products into the United States can be extremely difficult. Chinese firms often claim they are not subject to U.S. jurisdiction, and basic procedures—such as serving Chinese defendants and obtaining discovery—are subject to time-consuming and often unreliable international procedures that require cooperation from the Chinese central government. These barriers protect offending Chinese firms from the consequences of their actions and place the responsibility for compensating U.S. consumers on U.S. importers and retailers who are easier to bring to court. They also dull incentives for Chinese firms to ship safe

products by lightening their legal responsibility. Additionally, Chinese state-owned enterprises (SOEs) have recently begun using the U.S. Foreign Sovereign Immunity Act (FSIA) to claim they are immune to civil prosecution under U.S. law.

The case of dangerous Chinese drywall imports illustrates these challenges. Between 2004 and 2007, an estimated 100,000 homes were built using tainted drywall imported from China.* ⁷⁸ Testing revealed that drywall released significant amounts of sulfur dioxide inside consumers' homes, and the CPSC received reports of adverse health effects including asthma attacks, frequent nosebleeds, difficulty breathing, and persistent headaches. ⁷⁹ Affected consumers also reported failure of electrical devices due to corroded copper wiring, and CPSC inspections revealed tarnishing of electrical wires due to sulfur emissions. ⁸⁰ The CPSC received more than 4,000 reports of tainted drywall across 44 states. ⁸¹ Given the high number of affected homes and the expenses associated with repairs, property casualty consultants have estimated total economic costs associated with tainted Chinese drywall to be as high as \$25 billion. ⁸² To date, plaintiffs have sought more than \$2 billion from China-based firms in court. ⁸³

Affected U.S. homeowners brought more than 700 builders, suppliers, and insurers to court to seek damages; however, according to plaintiff lawyers, given the high costs incurred, only Chinese manufacturers had the resources necessary to fund repairs. Two firms supplied most of the tainted Chinese drywall that entered the United States: Knauf Plasterboard Tianjin, a Chinese affiliate of a German company; and Taishan Gypsum, a Chinese company linked to the Chinese SOE China National Building Material group (CNBM). Suits were filed against both Knauf and Taishan in 2009. However, while Knauf agreed to an \$800 million settlement with U.S. homeowners in 2011, extraordinary measures were necessary to force Taishan to participate in court proceedings. Taishan initially claimed that as a China-based company it was not subject to litigation in the United States. After a U.S. judge ruled in 2012 that Taishan could be tried, Taishan simply stopped appearing in court or responding to any case-related correspondence. Because it failed to participate, Taishan lost a \$2.7 million case brought by seven Virginia families; however, this penalty could not be collected. To compel the firm to pay the settlement, in 2014 a U.S. judge took the exceptional step of preventing Taishan or any of its affiliates from doing business in the United States and issued a penalty equal to 25 percent of its profits if it continued to remain in contempt of court, which prompted Taishan to start cooperating. In 2015, Taishan settled the single \$2.7 million case brought against it but still has not agreed to make payments to thousands of other affected U.S. homeowners.

Sovereign Immunity and the Hague Service Convention

Chinese SOEs have turned to the FSIA to argue that they are not subject to U.S. courts. Under the FSIA, foreign state-sponsored entities are generally protected from litigation, in accordance with the United States' commitment to the principle that states should not be subject to the judicial system of other states. However, the law contains exceptions related to commercial activity conducted by public entities. Foreign state-sponsored entities can be brought to court if they engage in commercial activity within the United States, take action related to commercial activity outside the United States that has a direct effect in the United States, or perform an action in the United States related to international commercial activity. He have challenged in court, a Chinese SOE may argue these exceptions do not apply. For example, in the case of CNBM, the SOE argued the commercial activity associated with the drywall cases was done by Taishan and not CNBM, and as such CNBM was not subject to the commercial activity exception and enjoyed immunity. In addition to CNBM's successful invocation of the FSIA in the drywall suit, the Aviation Industry Corporation of China (AVIC)—China's state-owned aviation and defense manufacturer—has used the FSIA as a defense twice, most recently in a \$70 million breach of contract suit brought by U.S. auto company Global Technologies Incorporated.

Both Chinese SOEs and private firms also benefit from the difficulty of serving legal suits in China (the process necessary to bring them to court). If a U.S.-based representative of a Chinese company cannot be found, then U.S. plaintiffs must use the Hague Service Convention, a procedure for serving suits internationally.⁹⁷ This process is

^{*} While estimates run as high as 100,000 affected homes, in court roughly 6,000 homes were represented in litigation against China-based companies. Marc Shapiro, Attorney at Law, Orrick, interview with Commission staff, January 31, 2017.

[†] CNBM is an SOE that effectively controls at least 20 percent of Taishan and has large shares in some of the largest construction firms in China. Marc Shapiro, Attorney at Law, Orrick, interview with Commission staff, January 31, 2017.

lengthy, burdensome, and reliant on the cooperation of Chinese government officials for success. Under the Hague Service Convention, a U.S. plaintiff provides the Chinese central government with service papers; these papers are then disseminated to local authorities who pass them on to defendants. However, the Chinese government has been known to reject applications for alleged inaccuracies, or reject papers directed to firms tied to the Chinese government. He American Bar Association has called the process unduly time consuming and notes that cooperation from Chinese officials cannot always be expected. After service was denied under the Hague Service Convention, on a few rare occasions papers have been sent directly to the Chinese government through diplomatic channels; however, China has also rejected efforts to serve papers through this avenue.

Efforts to bring suit against the SOE linked to Taishan and the Chinese government have been blocked. U.S. lawyers attempted to serve a case against China's State-Owned Assets and Administration Council (SASAC) through the Hague Convention (see the "Sovereign Immunity and the Hague Service Convention" textbox); nevertheless, the Chinese government simply refused to accept the service papers, claiming it was immune to litigation. ¹⁰² After the Chinese government refused service under the Hague Convention, a U.S. judge took the unusual step of allowing service papers to be delivered under diplomatic channels, but once again, the Chinese government sent the service papers back on the grounds it was immune. ¹⁰³ Efforts to hold CNBM responsible for safety damages were frustrated under the FSIA, a law that broadly gives foreign public agencies immunity from U.S. courts with a few exceptions. ¹⁰⁴ In the case of CNBM, a federal judge ruled that because it did not directly engage in drywall-related activity, it was protected from product safety suites leveled against it under the act. ¹⁰⁵

Importer Responsibility and Monitoring: Tires

Given the product safety risks associated with some Chinese imports and the effective legal protections enjoyed by Chinese producers, U.S. importers have an important role to play in confirming the safety of their imports, as they will likely bear responsibility for recalling products and compensating consumers. Chinese suppliers have occasionally altered the design of their products to cut costs, and if importers are not quick to take action, these products can circulate widely through the United States, increasing safety risks. For example, in 2007 the National Highway Traffic Safety Administration (NHTSA) told U.S. retailer Foreign Tire Sales (FTS) to recall 450,000 tires manufactured by Chinese producer Hangzhou Zhongce Rubber. 106 FTS first contacted Hangzhou Zhongce in 2000 and began buying radial truck tires from the company after their initial tests of Hangzhou Zhongce's tires showed they performed well and could run for 40,000 miles without splitting. 107 According to FTS, though, a few years later Hangzhou Zhongce unilaterally changed their tires by removing gum strips between tire belts. 108 The gum strips are a safety feature designed to keep tires from separating, which can lead to accidents. FTS first suspected the tires it purchased from Hangzhou Zhongce were defective in 2005, after a sharp increase in warranty claims on Zhongce tires. 109 That same year FTS inspected a Zhongce tire and found it appeared to be missing its gum strips. 110 However, FTS did not alert federal authorities to the change or any safety risks it posed to U.S. consumers until a lawsuit was brought against it nearly two years later. In May 2006, a Zhongce tire separated on an ambulance in New Mexico, causing the vehicle to roll over (there were no significant injuries).¹¹¹ In 2007, FTS was named as a defendant in a lawsuit after a Zhongce tire allegedly separated on a van in New Jersey, resulting in two deaths and one serious injury.¹¹² FTS then alerted the NHTSA to the concerns it had regarding Zhongce tires, eventually leading to a voluntary recall.*

Under U.S. law, FTS was responsible for replacing the defective tires. ¹¹³ Even so, FTS initially stated it did not have sufficient resources to initiate the recall. ¹¹⁴ As a small company with only seven employees, FTS claimed it would go bankrupt if it conducted a recall. ¹¹⁵ This created a risk that U.S. consumers would not receive reimbursement for the potentially faulty tires if the small company declared bankruptcy. Although imports of certain automobiles require payment of a deposit by importers that may be used to fund a safety recall or reimburse

^{*} FTS received some criticism from the NHTSA for waiting two years to communicate its concerns to federal authorities, with one NHTSA spokesperson stating that she was "outraged" by the delay. FTS for its part maintains the delay was necessary to finish its safety investigations. Andrew Martin, "Chinese Tires Are Ordered Recalled," *New York Times*, June 26, 2007. http://www.nytimes.com/2007/06/26/business/worldbusiness/26tire.html.

consumers, imports of low-value products such as tires require no such deposit. 116 Consequently, when FTS declared it could not afford a recall, there was no immediate and clear mechanism to fund such an action.

FTS ultimately recalled 255,000 tires, which likely cost the company \$51 million, based on FTS's initial recall cost estimates.* FTS sued Hangzhou Zhongce in U.S. court and Zhongce ultimately agreed to settle the case brought against it, although the amount paid by Zhongce is unknown. ¹¹⁷ Zhongce was China's second-largest tire manufacturer and likely had significant resources to reimburse FTS, but it is unknown to what extent FTS was able to recoup its losses. ¹¹⁸ Zhongce was also subject to a class-action suit brought by U.S. customers and initially claimed that U.S. courts did not have jurisdiction over it. This claim was eventually retracted, and the class-action case brought against Zhongce was terminated in favor of Zhongce and other American tire retailers named in the suit. ¹¹⁹

Gaps in Chinese Safety Regulation: Dog Treats

The Chinese government has implemented new safety regulations for human food that strengthen safety requirements, but only recently has addressed the safety of pet food and treats. For human food, China has centralized regulatory responsibility for food for the domestic market in the China Food and Drug Administration and given AQSIQ responsibility for food manufactured for export. It has also established an import-export safety inspection system for all food products, and increased punitive damages for firms found to be violating Chinese safety standards. By contrast, China's pet and animal food regulations were relatively undeveloped until 2016, and lacked specific rules for supervising pet food safety or punishing violators. In February 2016, China's animal feed regulations—which pertain to pet food products—were revised to decrease safety risks. As these rules are still new to the Chinese system, they will require time to develop into a robust, enforced system.

In the absence of a robust safety regulatory structure, Chinese pet food producers can manufacture products that are dangerous if consumed, and these products have found their way into the United States in the past. Since 2006, the United States has experienced two waves of dangerous Chinese pet products that resulted in the deaths of thousands of animals. The first wave happened in 2006 and 2007, when Chinese pet food products containing melamine entered the U.S. market across several pet food brands, resulting in the reported deaths of 1,950 cats and 2,200 dogs.¹²⁴ The FDA found that vegetable powders included in the food were adulterated with melamine, which can lead to kidney failure, and by March 2007 the FDA began sampling all wheat gluten shipments from China for melamine contamination. 125 Although the FDA quickly succeeded in identifying the contaminated ingredient, the agency was largely unable to identify the ultimate manufacturer of the tainted pet food ingredient. The FDA singled out Xuzhou Anying Biologic Technology as the supplier of the contaminated vegetable protein, but discovered that Xuzhou purchased vegetable protein from 25 different Chinese suppliers. 126 The FDA concluded it was unable to determine who the actual manufacturer was, which regions of the United States may have been affected, which Chinese firms are major exporters of vegetable proteins to the United States, where the affected vegetable proteins are produced in China, and what controls the Chinese government had in place to prevent contamination. 127 Given the opacity of the supply chain in China and the FDA's inability to acquire basic information about the scope of the contamination, the FDA issued a country-wide import alert of all vegetable protein imported from China, which remains in place today. 128 Given the possibility of melamine contamination of human food products, the FDA also issued a country-wide detention of all milk products from China—at the time many baby formula products within China were known to contain melamine, resulting in thousands of illnesses. 129

The second wave saw pet jerky treats from China tied to kidney disease in U.S. pets. From 2007 to 2015 the FDA received 5,200 complaints reporting gastrointestinal or kidney problems linked to jerky treats, most of them imported from China. At least 1,140 dogs were reported to have died. Problems with jerky treats first appeared in 2007, with reporting frequency rising in 2012 and 2013 (see Figure 8). The FDA was not able to identify the contaminant that caused these illnesses, but ultimately issued an import alert for Chinese dog treat companies beginning in 2014, having determined that certain jerky treats contained residues of antibiotics and antivirals. The FDA was not able to identify the contaminant that caused these illnesses, but ultimately issued an import alert for Chinese dog treat companies beginning in 2014, having determined that certain jerky treats contained residues of antibiotics and antivirals.

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^{*} Foreign Tire Sales estimated that the costs of replacing and disposing of tires amounted to roughly \$200 per tire. Andrew Martin, Chinese Tires Are Ordered Recalled, New York Times, June 26, 2007.

http://www.nytimes.com/2007/06/26/business/worldbusiness/26tire.html; Foreign Tire Sales, "Foreign Tire Sales Announces Voluntary Recall of Tires," August 9, 2007. http://www.foreigntire.com/documents/Consumer%20release%20Final%20WORD.pdf.

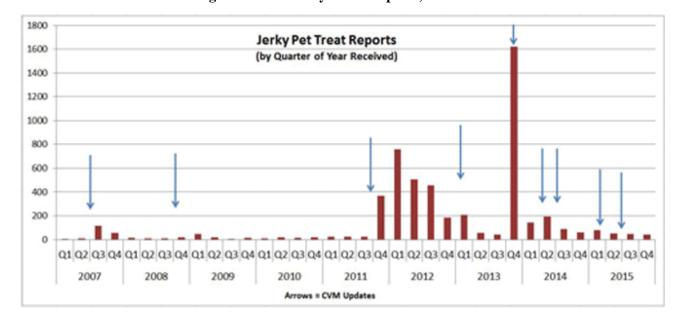


Figure 8: FDA Jerky Treat Reports, 2007-2015

Source: U.S. Food and Drug Administration, Jerky Pet Treats.

http://www.fda.gov/AnimalVeterinary/SafetyHealth/ProductSafetyInformation/ucm360951.htm.

Note: "CVM Updates" refer to communications from the FDA regarding its jerky investigations. These updates may expand public awareness of tainted jerky and increase the number of reports received.

The FDA faced several obstacles that may have delayed its action to detain imported jerky treats. First, the FDA had difficulty determining the degree to which the reports it was receiving constituted an increase beyond the normal baseline for pet-based illnesses. According to the FDA, it was not possible to track illness outbreaks easily, as the FDA's partner agencies that track human illness outbreaks do not do so for animal illnesses, and statistics for normal illness rates for some symptoms were not available. It was also difficult to collect evidence, as necropsies are not typically conducted on pets. Second, the FDA could not find a definitive contaminant that caused the illness, which complicated the FDA's ability to determine that the illness rates were above normal and to find specific importers to target for detention. The FDA devoted significant resources to identifying the contaminant: almost 1,000 samples were tested for a variety of pathogens and poisons, and the FDA partnered with the Centers for Disease Control and Prevention (CDC) to establish a control population to assess the scope of the problem. To date, the FDA has not determined the contaminant responsible for the illnesses; however, since it began detaining shipments from specific Chinese importers, the reports of jerky-related illness have declined.

U.S. Import Surveillance Reform: Lead Paint on Toys

The recalls associated with Chinese toys coated with lead paint in 2007 exposed shortcomings in U.S. product safety defense and led to improvements in how the CPSC monitors imports for safety. In March 2007, a routine CPSC inspection revealed that a line of toys imported from Hong Kong were coated in paint containing 5,000 parts per million of lead—50 times the amount currently allowed under U.S. law.* ¹³⁸ A recall was issued for the affected toys; however, after monitoring Chinese toys more closely, the CPSC found the lead-painted toys problem was widespread across several different U.S. retailers using Chinese suppliers. ¹³⁹ As China has been the largest supplier of toys to the U.S. market for more than a decade (China accounted for 85 percent of all U.S. toy imports in 2015), this discovery prompted massive recalls. ¹⁴⁰ Although the initial recall of toys from Hong Kong affected only 130,000 individual toys, by the end of 2007 the CPSC had issued 42 different recalls for excessive lead levels in toys, pulling back 17.6 million contaminated units. ¹⁴¹

^{*} Under current U.S. rules, children's products are generally prohibited from containing more than 100 parts per million of lead. U.S. Consumer Product Safety Commission, *Total Lead Content. https://www.cpsc.gov/Business--Manufacturing/Business-Education/Lead/Total-Lead-Content.*

A number of factors likely contributed to the widespread outbreak of dangerous Chinese toys. Within the United States, the CPSC had received fewer and fewer budgetary resources to apply to more products. From 1987 to 2008, the agency's budget had not kept pace with import growth, and the number of full-time staff had actually shrunk from 890 in 1973 to approximately 400 in 2008. At the time of the outbreak, the CPSC retained 15 inspectors to monitor 300 U.S. ports. Had agency also had a reactive stance toward monitoring consumer product imports, conducting routine inspections but not tracking shipments in real time as they entered U.S. ports. Additionally, there was no third-party safety certification required for children's products; importing firms could self-certify that they were in compliance with U.S. rules. Within China, a weak regulatory system was blamed for permitting Chinese toy manufacturers to save costs by cutting corners on safety. The Congressional Research Service cited poorly enforced Chinese safety regulations, underfunded regulatory agencies, weak product safety laws, poor interagency cooperation, and the absence of consumer safety advocacy groups in China as contributing to an environment conducive to poor safety practices.

Both the United States and China made positive steps in addressing the vulnerabilities that led to the 2007 toy recalls. In 2008, Congress passed the Consumer Product Safety Improvement Act, which introduced important safeguards for children's products. Under the act, all children's products sold within the United States must be tested by a CPSC-accredited facility, receive safety certification from a third party, and contain permanent tracking information. The CPSC also adopted a more proactive stance toward monitoring imports, implementing the risk-based, real-time tracking system in place today that allows the CPSC to watch all incoming shipments and dispatch inspectors to individual shipments associated with high safety risk. In September 2007, China and the United States signed an agreement deepening their cooperation to increase product safety. China pledged to immediately eliminate the use of lead paint in children's products through a paint certification system, and agreed to share information about Chinese supply networks in the event of a U.S. recall. The Chinese government also agreed to strip manufacturers of their export licenses if they violate safety regulations. In 2011, the CPSC established its first overseas office to maintain cooperation with Chinese regulators and provide safety training.

As seen in Figure 9, with respect to toys these efforts appear to have borne fruit. Total recalls associated with lead in children's products have declined significantly since 2007. While progress has been made, not all underlying risk factors have been addressed. For example, while civil society has increasingly pressed for improved safety regulations in China, activists take on significant political risk when doing so. In 2010, a Chinese man whose son had been poisoned by tainted milk was arrested after campaigning for compensation for families that lost children because of contaminated milk products. While the high visibility of the milk contamination scandal ultimately caused the Chinese authorities to free the man, according to Patrick Woodall, a food safety policy advocate, many Chinese activists continue to face the risk of imprisonment for drawing attention to safety issues, particularly those that are less high-profile. Mr. Woodall notes that economic growth targets and evaluations for local and provincial officials may also incentivize them to permit some corner-cutting for the sake of higher economic growth. In the United States, while CPSC staffing has increased to 567 employees overall as of 2016, the agency still lacks sufficient inspectors to man all U.S. ports of entry; currently, 44 import surveillance staff are responsible for more than 300 ports.

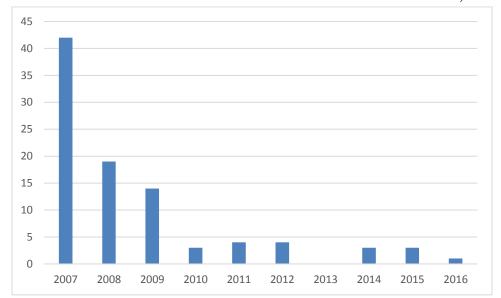


Figure 9: Recall Issuances of Children's Products Due to Lead Contamination, 2007–2016

Source: U.S. Consumer Product Safety Commission, Toy Recall Statistics. https://cpsc.gov/Safety-Education/Toy-Recall-Statistics; Charles W. Schmidt, "Face to Face with Toy Safety: Understanding an Underestimated Threat," Environmental Health Perspectives, February, 2008. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2235199/.

Media and Private Party Investigations: Formaldehyde Flooring

U.S. investors, media, and nongovernmental organizations can help identify flawed Chinese products and create pressure to recall those products. By their very nature, though, these efforts tend to identify products that have already entered the United States and affected U.S. customers. In 2013, a hedge fund manager was concerned that U.S. flooring retailer Lumber Liquidators had rapidly increased its profit margins and might be doing so by importing flooring that was underpriced and not compliant with U.S. law. The financial manager short-sold Lumber Liquidators' stock and later received a tip that the flooring the company was importing from China was tainted with formaldehyde. The formaldehyde can be present in some glues used in the construction of flooring and can leak into homes via the air. This tip led investigators in California to test Lumber Liquidators' product, revealing that the flooring sourced from China routinely contained formaldehyde in excess of California's state standards. On average, the Chinese samples contained six to seven times the level of formaldehyde permitted by state law, and some samples contained up to 20 times the permitted amount. Prolonged exposure to formaldehyde has known health risks such as increased chances of developing asthma, chronic respiratory irritation, and leukemia.

Following this testing, the news broadcast network CBS launched its own investigation into flooring sourced from China. CBS tested 31 boxes of Chinese-made flooring in several U.S. states and found that while all of them carried labels claiming they were compliant with California standards,* only one contained less than the amount allowed by California law and some exceeded the legal limit by a factor of 13. ¹⁶¹ CBS also sent inspectors to Chinese flooring mills Lumber Liquidators sourced from; the suppliers admitted they provided flooring that contained high levels of formaldehyde and deliberately mislabeled them as being compliant with California standards. ¹⁶² Lumber Liquidators maintained it has inspectors who oversee Chinese suppliers to ensure they are in accordance with California standards. ¹⁶³

CBS revealed its findings in a *60 Minutes* episode in August 2015.¹⁶⁴ These findings prompted Lumber Liquidators to cease selling China-sourced flooring nationwide and offer free formaldehyde testing to consumers. The CPSC and the CDC tested Chinese flooring associated with the *60 Minutes* investigation for health defects.¹⁶⁵ The CDC

^{*} There was no nationwide U.S. standard for formaldehyde in flooring at the time of testing. Anderson Cooper, "Lumber Liquidators," CBS, August 16, 2015. http://www.cbsnews.com/news/lumber-liquidators-linked-to-health-and-safety-violations-2/.

found a few negative health risks associated with the tested flooring, including an increase in breathing problems and a mild increase in cancer risk (between six and 30 extra cases of cancer for every 100,000 people). The CPSC did not insist on a recall of flooring after completing its investigation, but required Lumber Liquidators to keep Chinese flooring out of its stores and continue offering free testing. Another investor-based investigation was launched into Chinese flooring sold by Lowe's home improvement stores following the 60 Minutes report. Testing of this lumber revealed formaldehyde at levels ten times higher than the California limit, prompting Lowe's to quickly recall the tested flooring line.

Adoption of a national standard for formaldehyde was delayed amid lobbying from the Chinese government and concerns from U.S. industry and some members of Congress that the proposed standard would be too onerous.¹⁶⁹ Until 2016 there was no U.S. nationwide standard for formaldehyde levels in flooring and lumber. Legislation was signed in 2010 directing the Environmental Protection Agency to draft a standard; once it had done so in 2013 the Chinese government lobbied the National Institute of Standards and Technology to revisit the standard, as it would significantly raise the costs associated with furniture production.¹⁷⁰ A standard based on the California requirements was ultimately adopted in 2016 and will enter force March 21, 2017.¹⁷¹

Conclusions

Chinese imports to the United States present several risks to product safety. While China's safety regulatory structure has improved, regulatory gaps remain and the difficulty associated with bringing Chinese firms to court means Chinese manufacturers are not incentivized to deliver safe products. U.S. safety agencies have adopted beneficial import-monitoring reforms, but still must direct limited resources to inspect a copious flow of Chinese imports to the United States. Finally, the sheer scale of Chinese imports to the United States magnifies the impact of any lax manufacturing procedures, as defective Chinese consumer goods can circulate broadly throughout the United States.

- U.S. product safety regulators have limited resources to monitor imports. While the U.S. Consumer Product Safety Commission (CPSC) has implemented a proactive methodology to monitor imports as they enter the country, they do not have staff to man every port and have not been able to inspect every high-risk shipment.
- China is the largest source of U.S. consumer product imports and accounts for a disproportionately large share of safety recalls. In 2014, 23 percent of all consumer products came from China, but Chinese consumer goods accounted for 51 percent of all recalls reported by the CPSC.
- Communication between the CPSC and foreign regulators is limited due to statutory information protection requirements that make international information-sharing agreements unworkable.
- Chinese firms enjoy a degree of protection from U.S. product safety lawsuits due to the difficulties associated with serving suits in China. Chinese state-owned enterprises have used the U.S. Foreign Sovereign Immunity Act to claim immunity from product safety litigation. These legal protections may undermine incentives for Chinese suppliers to produce safe products for export.
- China's domestic product safety framework has only recently adopted strong regulations for certain goods such as animal products, and until an effective framework is in place the risk of unsafe imports entering the United States is high. Chinese civil society groups such as consumer safety advocates also face political challenges when petitioning for strong product safety rules and enforcement.
- Given the product safety challenges posed by China and the volume of imported consumer goods, U.S. importers have an important role in ensuring Chinese goods do not pose a safety hazard to U.S. consumers. Without careful monitoring and reporting by importers, defective Chinese goods can spread widely through the U.S. marketplace.

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- ⁴ U.S. Consumer Product Safety Commission, Recall Listing. https://www.cpsc.gov/Recalls/; Richard O'Brien, Director of International Programs, Consumer Product Safety Commission, interview with Commission staff, February 1, 2017.
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