

# eFiling Certificate of Compliance Study Assessment

# Consumer Product Safety Commission (CPSC) Staff Report

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This report was prepared by CPSC staff, and has not been reviewed or approved by, and may not reflect the views of, the Commission.

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### **Executive Summary**

From October 2017 to February 2018, the CPSC's Office of Import Surveillance (EXIS) conducted an efiling Certificate of Compliance Study (Certificate Study) to assess the correlation, if any, between the timing and availability of a Certificate of Compliance (certificate), the data provided on a certificate, and the violation rate in imported finished products. For this study, violations included chemical content limits for lead in substrate, lead in surface coatings, certain banned phthalates, small parts hazards, F963 Toy Standard violations, and flammability in certain textiles. For this study, violations excluded requirements for tracking labels, certificates, and product registration cards. The Certificate Study was a logical next step to the 2016 eFiling Alpha Pilot (Alpha Pilot), which successfully tested the ability of importers to provide targeting/enforcement data and the ability of CPSC to collect these data. The Certificate Study, approved by the Commission in June 2017, is part of CPSC's ongoing effort to evaluate the benefit of collecting advance electronic data to target potentially noncomplying and hazardous imports before they reach consumers.

Staff designed and implemented the Certificate Study to evaluate certificates from a subset of five product areas arriving at nine ports of entry. The study involved the collection and review of certificates for entries examined based on existing procedures. Import targeting is based on a combination of factors, including the Risk Assessment Methodology (RAM) risk score, local operations coordinated with U.S. Customs and Border Protection (CBP), referrals from CBP to CPSC staff, and Commercial Targeting and Analysis Center (CTAC) targeting programs. The Certificate Study team set a goal of 750 entry exams and ultimately examined a total of 843 unique entries, of which 75 had at least one product sample with a targeted violation.

Based on current EXIS import screening practice, if the certificate did not accompany the shipment, staff allowed the importer 24 hours from the time of the request to provide a certificate for each regulated product. If a certificate was not provided within 24 hours of the request, staff sampled the product for a possible certificate violation, as well as other possible violations, if applicable, and sent the sample to the Office of Compliance for evaluation.

Staff's analysis of the data collected in the Certificate Study indicates that the ability to provide a certificate within 24 hours of CPSC's request is strongly associated with product compliance. Based on the Certificate Study data, staff found that an entry is <u>five times</u> more likely to have a violation if a certificate is never provided to CPSC, and three times more likely if one is provided, but not within 24 hours of CPSC's request.





Through the Certificate Study, staff also sought to understand which, if any, data elements could be used for predictive targeting in the future. Accordingly, the Certificate Study team assessed each of the seven required data elements on a certificate (per 16 CFR part 1110) on an element-by-element basis to identify any trends or correlations between a data element and the number of violations found. Due to a number of limitations, primarily the amount of data that could be collected in the given timeframe, plus the lack of uniformity in data entry for each element on a certificate, staff advises that the identified trends merit further evaluation, but can not yet be considered predictive indicators.

Staff identified four data elements from certificates that show potential correlations to the rate of violations. The first prospective correlation between a specific data element and a violation is the city of manufacture. Staff found that certain locations equated to substantially higher-than-average violation rates. The second element of interest, based on the Certificate Study, is the place of testing, often referred to as the testing lab. Staff found that certain testing labs had higher violation rates when compared to other labs. The third and fourth elements with possible correlations to violations are the date of lab testing and the date of manufacture. These two dates, when compared to each other, provide potential correlations to show that certificates with a manufacture date before the testing date were more likely to have a violation.

The Certificate Study demonstrates a strong association between the timely availability of a Certificate of Compliance and the rate of violations in imported finished products. Staff concludes that if a means to verify the presence of a valid certificate is incorporated into the RAM score before import, that information would be a major predictor of a violation. The Certificate Study has also provided the agency with valuable information on what elements on a certificate could potentially be used to validate the presence of a certificate (without providing the entire certificate), as well as improve the agency's import targeting. Staff found that testing labs, manufacturing locations, and manufacturing and testing dates in any future eFiling initiative have the potential to (1) validate the existence of a certificate, and (2) allow staff to refine RAM modeling and target shipments for examination. This study, combined with the

Alpha Pilot, showed that importers are able to provide these data, thus providing a compelling case for continuing the CPSC eFiling initiative.

## Section I: Overview of Import Surveillance at CPSC

The CPSC's Office of Import Surveillance conducted an efiling Certificate of Compliance Study to assess product compliance and its relation to Certificate of Compliance data from October 2017 to February 2018. The goal of this study was to allow staff to assess the correlation between the timing and availability of a certificate, as well as the specific data on a certificate, with finished product compliance. This study was a follow-up to the 2016 eFiling Alpha Pilot (Alpha Pilot), and is part of CPSC's ongoing effort to evaluate the benefit of collecting advance electronic data to target potentially noncomplying and hazardous imports before they reach consumers.

CPSC established an Import Surveillance Division (now the Office of Import Surveillance or EXIS) in 2008, which resulted in co-locating CPSC personnel with U.S. Customs and Border Protection (CBP) staff at select ports of entry. Initially, CPSC had a limited set of software tools to facilitate analysis of import entry data targeting imported products. The agency was unable to conduct consistent and automated risk assessments of imported consumer products. At that point, the agency's targeting capabilities involved locally developed programs focused on targeting products and companies deemed to be high risk. Staff manually performed data analysis and produced metrics reports on an as-needed basis, rather than on a scheduled, recurring basis. Staff's analysis and reporting required significant time, affecting the office's limited resources.

In 2008, Congress enacted the Consumer Product Safety Improvement Act (CPSIA). Section 222 of the CPSIA required the CPSC to develop a Risk Assessment Methodology (RAM) to screen shipments of consumer products intended for import into the United States, including consumer products potentially in violation of health and safety laws. Section 222 also required the CPSC to collaborate with CBP and use the International Trade Data System (ITDS)<sup>1</sup> to evaluate information about consumer products intended for import into the United States. To meet this law's requirements, CPSC began an in-depth analysis of current and potential targeting approaches. CPSC staff created a RAM detailing the ways that CPSC could use import data to create a holistic approach to targeting and enforcement for imported products.

In late 2011, CPSC launched a pilot targeting system to test the effectiveness of the defined methodology. This pilot ITDS/RAM system used a rules-based approach and aggregate-scoring models to highlight potential risk, patterns, and targets. The RAM provided CPSC staff with easy access to key data, including calculated risk scores, to enable EXIS Compliance Investigators (CIs) to review entry lines and act

<sup>&</sup>lt;sup>1</sup> Part of the U.S. CBP ACE Modernization effort. See https://www.cbp.gov/trade/automated for further information on that program.

on them, as needed. In 2017, CPSC transitioned to the ITDS/RAM 2.0 system. Analytic and performance reports in ITDS/RAM 2.0 aid staff in modifying and fine-tuning risk assessment and targeting rules.

In September 2014, CPSC staff began engaging stakeholders<sup>2</sup> about electronic filing of additional import data for CPSC purposes. Staff envisioned a pilot program, known as the "eFiling Alpha Pilot," as the next step to boost CPSC's import targeting capabilities. Several factors led to the Alpha Pilot, starting with CBP's modernization of the trade monitoring and tariff collection management system, known as the Automated Commercial Environment (ACE). Taken together, provisions of the SAFE Port Act of 2006 and the CPSIA direct the Commission to align with CBP's modernization efforts to improve CPSC's risk assessment methods. CBP's efforts include the creation of a single government interface for shipments entering or exiting the United States, where all required information could be transmitted electronically, thereby streamlining data-sharing for all parties. CBP created the Partner Government Agency Message Set (PGA Message Set), to facilitate the collection of additional information required by federal agencies.

Another key factor that led to the Alpha Pilot was the 2008 direct final rule on "Certificates of Compliance" (73 FR 68328), codified at 16 C.F.R. part 1110 (1110 rule). Among other things, the 1110 rule limits the parties who must issue a certificate to importers for products manufactured outside the United States, and to manufacturers of products manufactured inside the United States. The rule also establishes that certificates may be submitted in hard copy or electronic form. In May 2013, the Commission issued a notice of proposed rulemaking to amend the 1110 rule (78 FR 28080) ("1110 NPR"), to clarify certificate requirements for new rules related to testing and labeling of children's products and component part testing, 16 C.F.R. parts 1107 and 1109, and to require electronic filing (eFiling) of certificates for imported products, as provided in section 14(g)(4) of the CPSA.

Finally in 2014, President Obama issued Executive Order 13659, Streamlining the Export/Import Process for America's Businesses (EO). The EO required certain federal agencies to enhance their technology used to modernize and simplify the trade processing infrastructure. The EO also mandated that applicable government agencies use CBP's ITDS and supporting systems, such as ACE, to create a "single window" through which importers could electronically submit import-related data for clearance. As an independent agency, the CPSC was not included in this mandate; however, the agency, to the extent possible, sought to conform to this initiative.

Beginning in July 2016, the CPSC Alpha Pilot was a six-month joint initiative between CPSC and CBP to test the electronic filing of targeting/enforcement data for certain imported products under CPSC's

<sup>&</sup>lt;sup>2</sup> Since 2014, CPSC staff has engaged the public on the CPSC's efiling initiative many times, including: Public workshop on electronic filing of certificates as included in proposed rule on Certificates of Compliance – September 18, 2014; Webinars and Meetings with CBP's Commercial Customs Operations Advisory Committee (COAC) Working Group – March 12, 2015, March 26, 2015, April 9, 2015, and May 13, 2015; Chairman Kaye Meeting with Members of the COAC 1USG Subcommittee-CPSC Working Group – April 28, 2015; Webinar with Border Interagency Executive Council (BIEC) – September 16, 2015; Working meetings with Trade Support Network (TSN) – September 16, 2015, and September 23, 2016; Webinars to demonstrate the eFiling Product Registry – October 1, 2015 and February 25, 2016; Kickoff meeting to eFiling Alpha Pilot with participants – November 18, 2015; Adult wearing apparel webinar on Enforcement Discretion Regarding GCCs for Adult Wearing Apparel Exempt from Testing with eFiling Alpha Pilot Participants – April 13, 2016; Broker feedback meeting on eFiling with Bureau Veritas – August 4, 2016; Public meeting for review and feedback on the eFiling Alpha Pilot with participants – January 26, 2017

jurisdiction. Because CPSC staff could not use the targeting/enforcement data when assigning risk scores in the RAM to target potentially noncompliant shipments, this limited the Alpha Pilot. Instead, the Alpha Pilot established and assessed the infrastructure and processes required for successful eFiling. The Alpha Pilot demonstrated that importers are capable of providing targeting/enforcement data and that CPSC, in collaboration with CBP, is able to receive such data in the RAM for CPSC's entry and enforcement purposes. Before the Alpha Pilot, no mechanism existed for CPSC to gather these data electronically.

The Alpha Pilot was the first step in better understanding not only the benefits and uses, but also the limitations and challenges of eFiling targeting/enforcement data. CPSC staff's assessment from the Alpha Pilot indicated that targeting/enforcement data could be incorporated into the rule sets in the RAM, thereby increasing the volume of data that can be used by the system for assessing and assigning risk scores to entries. As a next step to the Alpha Pilot, staff recommended a two-pronged approach: (1) eFiling of data to optimize the construction of rules in the RAM to increase or decrease an entry line's risk score using a larger set of volunteer participants; and (2) a Certificate Study that would assess the correlation between product compliance and specific data elements on a certificate.<sup>3</sup>

The Certificate Study was a logical next step after the Alpha Pilot. While the Alpha Pilot successfully tested the ability of importers to provide targeting/enforcement data and the capability of CPSC to collect these data, the goal of this Study was to determine what data provides the most value to CPSC's targeting and enforcement efforts. Whereas the Alpha Pilot relied on volunteers who were likely compliant, the Certificate Study would allow for a more representative look at the effects of having timely certificates and also examine specific data across noncompliant and compliant importers.

In June 2017, the Commission approved the Certificate Study as the next step in CPSC's path to assess an electronic filing component for the RAM. This report summarizes the Certificate Study approach and findings.

# Section II: Overview of the eFiling Certificate Study

EXIS collected data related to the Certificate Study to assess product compliance and its relation to certificate data from October 2017 to February 2018. The goal of this study was to assess the correlation between the existence of a certificate, the timing of providing a certificate to CPSC, as well as the specific data on a certificate, with finished product compliance.

The Certificate Study was not limited to the targeting/enforcement data elements collected as part of the Alpha Pilot, but rather, was designed to provide information about all of the data elements on a certificate and their correlation to risk/compliance. The ultimate goal of the Certificate Study was to inform potential next steps in CPSC's eFiling project.

The Certificate Study provides data on

• the impact of having a certificate on product compliance;

<sup>&</sup>lt;sup>3</sup> eFiling Alpha Pilot Report: https://business.cpsc.gov/zh-CN/content/efiling-alpha-pilot-evaluation-report

- the impact of certificate timeliness on product compliance; and
- the type of data on a certificate that can be useful for targeting/enforcement purposes.

Staff designed and implemented the Certificate Study to evaluate certificates from a subset of commonly imported products and higher-volume ports. Import staff worked closely with statisticians from CPSC's Division of Hazard Analysis to determine an experimental design that balanced timeline and resource constraints, while ensuring a robust collection of data, from which statistically valid conclusions could be drawn.

To determine the scope of the study, staff analyzed import product data volume, based on HTS code, port, and CPSC priority. Ultimately, staff chose nine port areas and the following five commonly imported and well-defined product areas for inclusion in the study: pacifiers, baby clothes, bicycles, toys, and lighters.

Staff included in the Certificate Study entries that arrived into the selected ports, with the specific products, that were already targeted for examination as a part of staff's normal operating procedures. In other words, staff designed the study to collect and review certificates of compliance for entries that would normally have been inspected based on the staff's typical course of operation. Currently, staff targets and inspects products based on a combination of factors, including the RAM risk score, local operations coordinated in conjunction with CBP, CBP referrals to CPSC staff, and CTAC targeting programs.

If a certificate did not accompany the shipment, the CI requested a certificate for each product in an in-scope entry.<sup>4</sup> Based on current CPSC field-screening practice, the importer was given 24 hours from the time of the request to provide a certificate for each product. If a certificate was not provided within 24 hours of request, and field screening found no other possible violations, the CI sampled the product for a possible certificate violation and sent it to the Office of Compliance for evaluation. Staff found that the Certificate Study process increased the examination burden on staff and reduced the number of exams that an investigator could perform. In some cases, the Certificate Study process added burden to

<sup>&</sup>lt;sup>4</sup> The CPSA requires that certificates of compliance must (1) "accompany the applicable product or shipment of products covered by the same certificate"; (2) be "furnished to each distributor or retailer of the product . . ."; and (3) be furnished to the Commission "[u]pon request." Section 14(g)(3) of the CPSA; 15 U.S.C. § 2063(g)(3). According to our regulation, certificates for imported consumer products "must be available to the Commission from the importer as soon as the product or shipment itself is available for inspection in the United States." 16 C.F.R. § 1110.7(c)(1). Certificates can be provided in either a hard copy (paper) format, or an electronic format, as long as they comply with our regulation and the statutory requirements for certificates. 16 C.F.R. § 1110.5. Generally, for a paper certificate to meet the "accompany" requirement and be available to the Commission "as soon as the product is available for inspection in the United States," is should be placed inside the shipping container or box. Certificates of Compliance Final Rule, 73 *Fed. Reg.* 68,328, 68,329-31 (Nov. 18, 2008). Electronic certificates can meet the "accompany" requirement "if the certificate is identified by a unique identifier and can be accessed via a World Wide Web URL or other electronic means, provided the URL or other electronic means are created in advance and are available, along with access to the electronic certificate itself, to the Commission or to the Customs authorities as soon as the product or shipment of products in either paper or electronic format, CPSC's practice is to allow an importer 24 hours to comply with CPSC's request for the certificate. Typically, upon request, certificates are furnished to CPSC via electronic mail.

importers when goods were held at the port for the 24-hour period while staff awaited submission of a certificate.

Working with the Directorate for Epidemiology (EPI), the Certificate Study team set a goal of including 750 entry exams in the study by the end of the study period. Staff set this goal based on an analysis of the expected volume of entries at the ports in the study for October 2017 through February 2018, from the volume of entries observed for the study parameters the prior year. Ultimately staff examined a total of 843 entries as part of the study.

The next section of this report details the results of the Certificate Study and staff's identified correlations between certificates of compliance and product violation rates.

# Section III: Results of the Certificate Study

CPSC staff's assessment of the Certificate Study data began in March 2018. Staff's analysis sought to understand the correlations, if any, between the timing and availability of a certificate, the integrity of the data provided on a certificate, and the rate of violations in imported finished products. For this study, violations included chemical content limits for lead in substrate, lead in surface coatings, certain banned phthalates, small parts hazards, F963 Toy Standard violations, and flammability in certain textiles. For this study, violations excluded requirements for tracking labels, certificates, and product registration cards. The study included 843 total entries, and 75 entries had at least one product with a violation.

#### Timing and Availability of a Certificate

Staff considered whether the existence of a certificate, or the time it took for an importer to provide it, had any correlation to the violation rate observed. CPSC staff segmented the study data into four distinct groups, based on the study design:

- Certificate accompanied shipment (included in the shipping carton or URL available);
- Certificate did not accompany, but was received within 24 hours;
- Certificate did not accompany, but was received beyond 24 hours;
- Certificate did not accompany and was never received.

#### Figure 2: Entries by Certificate Availability



Based on staff's analysis of the data collected, the Certificate Study indicates that the ability to provide a certificate within 24 hours of CPSC's request is strongly associated with product compliance. Of the 71 entries for which a certificate accompanied the shipment, staff found only one violation; a violation rate of approximately one percent. Furthermore, staff found that the violation rate increased only slightly for entries for which a certificate was provided within 24 hours of request. Staff calculated a violation rate of five percent for these entries; 28 of the 561 entries.

The Certificate Study data demonstrate considerable increases in the violation rate for entries for which a certificate was provided to CPSC more than 24 hours after a request was made, or where no certificate was ever provided. CPSC staff found 89 entries for which the certificate was received, but more than 24 hours after request. Of these 89 entries, 14, or almost 16 percent, were found to contain violations. Even more striking, staff found that of the 122 entries for which a certificate was never provided, 32, or more than 26 percent, had a violation. When combined, the violation rate of these two categories is just under 22 percent.

When compared to entries where a certificate either accompanies a shipment or is provided within 24 hours, staff found that **an entry is over** <u>five times</u> **more likely to have a violation if a certificate is never provided**, and over three times more likely if it is not provided within 24 hours of CPSC's request.

#### Figure 3: Violation Rate by Certificate Status



A summary of the violation rates can be found in Table 1 below.

		Number of	Percentage
	Number	Entries	of Entries
Status of Certificate	of	with	with
	Entries	Violations	Violations
Certificate accompanied shipment	71	1	1%
Certificate did not accompany; was received within 24 hours	561	28	5%
Certificate did not accompany; was received beyond 24	89	14	16%
hours			
Certificate did not accompany; was never received	122	32	26%

Table 1: Violation Rates by Certificate Availability

EXIS chooses shipments to examine based on many factors, including the RAM score, CTAC special targeting operations, and local referrals/operations with CBP. The Certificate Study demonstrates that the inability to provide a certificate yields a violation rate that is 50 percent more than CPSC's current best predictor of finding a violative product.

Figure 4: Violations Comparison



Notably, staff found minimal overlap between the Certificate Study importers who did not provide a certificate and importers with violative products that were identified using the current best predictor. Of the 32 entries with violations that did not have a certificate, staff determined that only four of these were also detected using the current best predictor. Staff concludes that if the presence of a valid certificate is incorporated into the RAM score before import, this information can be a meaningful predictor of a violation.

#### Data Elements on a Certificate

Through the Certificate Study, staff sought insight into not only the correlation between the existence and timing of a certificate and violations identified, but also what specific data elements, if any, correlate to higher or lower violation rates. An entry can have many products, and thus, many required certificates; in total, 2,921 certificates were collected for the 843 entries in the study. An entry was considered violative if any of its associated products were violative; so one entry could have more than one violative product. Staff wanted to understand which, if any, data elements could be used for predictive targeting in the future. Accordingly, staff manually entered certificate data from the certificates received in the study into a database to analyze each element. Of the 75 entries in the Certificate Study with violations, 32 are for entries for which a certificate was never received. Staff identified and analyzed the remaining 43 entries, which had 61 corresponding certificates with a violation.

Certificates of Compliance contain seven required data elements, per 16 CFR § 1110.11, summarized below:

1. Identification of the finished product;

- 2. Each consumer product safety rule or statutory requirement to which the product is being certified;
- 3. Certifier (name and contact information);
- 4. Contact information for the person maintaining records of test results (name and contact information);
- 5. Date and place where the finished product was manufactured;
- 6. Date and place where the finished product was tested; and
- 7. Third party laboratory on whose testing the certificate depends (name and contact information).

The Certificate Study team assessed the data on an element-by-element basis to identify any trends or correlations between a data element and the number of violations found. One exception to this is the consumer product safety rule or rules to which each product was being certified. Many of the certificates involved toys, which are subject to more than one rule and various subsections of the toy standard (ASTM F963)<sup>5</sup>, and certifiers did not provide this information in a standardized manner. Because of this, and given the resource and time constraints of the Certificate Study, each consumer product safety rule listed on the furnished certificate, based on the manner and description of the rules identified, and assigned a value of high, medium, or low to the detail and quality of the data provided. Staff did not find any correlation between the level of detail or quality of the list of rules provided on the certificate and any increase or decrease in violation rate.

Staff concludes that a number of factors limited staff's ability to determine strong predictive qualities for each certificate data element in the Certificate Study. The first limiting factor staff identified is that the amount of data that could be collected for each data element was constrained by the timeline of the Certificate Study and the EXIS resource availability to perform the study. Staff found 75 entries in the Certificate Study with violations. However, as shown above, 32 of these violations are for entries for which a certificate was never received. Ultimately, staff only had 61 certificates, from 43 unique entries, available for data analysis at the element level for predictive traits. Accordingly, staff's data analysis of the predictive quality of each data element is limited to this subset. Statistically this is a small sample size, and as such, staff advises that the possible correlations identified are considered trends that merit further evaluation, but these possible correlations cannot be considered predictive indicators yet. Staff presumes that a larger data pool would have allowed the EPI team to make more certain assessments of the predictive value of these elements.

The second limitation staff identified is the data format found on the certificates themselves. CPSC's regulation and guidance on certificates allows for a wide range of data input that is not standardized or tightly structured. For example, staff found that certifiers' data for "Place where the

<sup>&</sup>lt;sup>5</sup> Note that CPSC guidance states that manufacturers and importers should list each applicable section of ASTM F963 for which the toy was tested. Many certificates did not follow this guidance. https://www.cpsc.gov/Business--Manufacturing/Testing-Certification/Childrens-Product-Certificate/

product was manufactured " is highly variable across certificates. Some certificates provide full addresses, some provide a province/state and country, and still others provide a city and country. In many instances, staff found it difficult to identify whether the listed place is a province, city, or local town. Staff concludes that predictive modeling of all data elements on a certificate is limited by the lack of consistency across data on a certificate.<sup>6</sup>

Based on staff's analysis of the 61 certificates that were received and had products with violations, four data elements emerged that show prospective correlations to an increase in the violation rate. Staff could potentially use such correlations for risk assessment targeting in the future.

#### City of Manufacture

Staff found that one potential correlation between a specific data element and a violation is the location of manufacture, specifically the city of manufacture. Certain specific locations of manufacture do possibly correlate to a higher violation rate compared to other manufacturing cities. Although the sample size is small, staff found that the correlation of this element to violations is strong enough for certain locations that this element can be considered potentially predictive of violations. Consequently, staff concludes that **the city of manufacture may be a viable element for data collection in future eFiling initiatives to assist in targeting efforts and to validate certificate data.** 





<sup>&</sup>lt;sup>6</sup> Note, however, that staff now has more information to describe the types of data that certifiers are using for each data element, to inform and assist the CPSC if the agency pursues standardization of this information.

#### Testing Lab

Staff found that a second element of interest, based on the Certificate Study, is the place of testing, often referred to as the testing lab. Staff found that certain testing labs had higher violation rates when compared to that of other labs. Two labs in particular had significantly higher than average violation rates, while eight labs, each of which issued at least 20 certificates, had no violations.

Additionally, due to CPSC requirements for children's products that the testing must be conducted by a third party laboratory whose accreditation has been accepted by CPSC to perform each test, this element provides staff with the ability to do additional, automated data checks to verify that the accreditation of each lab listed is CPSC-accepted for the time frame and test performed.

Staff concludes that the identification of a third party lab provides a strong data point for children's products, as the importer understands that testing is required to be in compliance with CPSC regulations. Accordingly, place of testing may be a valuable element for data collection to assist in targeting efforts and to validate certificate data.



Figure 6: Violation Rate by Lab

#### Date of Lab Testing/Date of Manufacture

The third and fourth elements identified by CPSC staff analysis are the Date of Lab Testing and the Date of Manufacture. When staff assessed these two elements individually, the elements do not provide any insight into possible violations of the product. However, when staff compared each date with the other, and analyzed the data based on the range of months between the two dates, possible correlations

emerge.<sup>7</sup> Staff found that of the certificates with no violations, only a quarter had a date of lab testing after the date of manufacture. However, more than half of the certificates for products with a violation had a date of lab testing after the date of manufacture.





As a result of further analysis, staff found that **certificates with a testing date after the manufacture date were more than three times more likely to have a violation**<sup>8</sup>. Staff cautions that the data limitations prevent this date variance from conclusively being considered a predictive data point, but the data are potentially correlative, and should be considered for inclusion in any ongoing eFiling and certificate study collection initiatives.

Ultimately, staff did not find a single certificate data element that provided as strong of a correlation to violations as the lack of a timely filed certificate. Staff advises that the data limitation in the Certificate Study prevented a more robust analysis of each data element. However, even with limited data, staff found multiple elements that provide potential correlations for further pursuit and analysis, both individually and collectively. Staff concludes that the collection of such data elements in any future eFiling initiative can (1) validate the existence of a certificate, and (2) allow staff to refine RAM modeling and target shipments for examination.

<sup>&</sup>lt;sup>7</sup> Because analysis was done at the month level, any certificate with a Date of Lab Testing in the same month as the Date of Manufacture was coded as if the Date of Lab Testing was before the Date of Manufacture.

<sup>&</sup>lt;sup>8</sup> The correlation of this date comparison is a factual finding of the study and does not indicate compliance with, or violation of, the Commission's testing regulation at 16 C.F.R. part 1107. Compliant testing regimes depend on each manufacturer's testing and manufacturing scheme, for which they are required to have appropriate documentation. Staff did not assess whether firms with violative products were otherwise compliant with the Commission's testing regulation.

## **Section IV: Conclusion**

Staff concludes that the Certificate Study has shown a strong correlation between the timely availability of a certificate of compliance and the rate of violations in imported finished products. The Certificate Study also provided the agency with valuable information on what elements on a certificate could potentially help improve the agency's import targeting. Staff found that importers who follow the law by importing shipments accompanied by the required certificate have the lowest violation rate. Moreover, importers who cannot provide a timely certificate, or who never provide a certificate, are five times more likely to have violative products than importers whose certificates accompany the shipment, or who are able to produce certificates within 24 hours of CPSC's request. Additionally, staff found that certain testing labs, manufacturing locations, and manufacturing and testing dates, all have possible correlations to higher or lower violation rates.

The results of the Certificate Study provide evidence that the eFiling of key certificate data before import will allow the CPSC to improve its targeting and enforcement at the ports and better protect consumers. This study, combined with the Alpha Pilot which showed that importers are able to provide this data, offers a compelling case for the continuation of the CPSC eFiling initiative.