Liquid Laundry Packets Post-Implementation Period Report Through 2018

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

Background

In 2012, injury incident reports associated with liquid laundry packets began to appear in the surveillance data maintained by the CPSC. The main hazards were ingestions which, in the worst case, can lead to fatalities, and ocular injuries, which require medical assistance. In 2013, CPSC staff requested voluntary action by industry. Within months, ASTM held a kickoff meeting with ASTM 15.71 to address the hazards associated with these products, eventually developing a number of voluntary safety measures, including the packaging, labeling, and taste/dissolution properties of liquid laundry packets. The current voluntary standard, ASTM F3159-15e1, *Standard Safety Specification for Liquid Laundry Packets*, published in October 2015. By December 2016, industry implemented these voluntary safety measures (according to ASTM 15.71 participants), with nearly all of the products available for sale to consumers complying with the voluntary standards in ASTM F3159-15e1.

In evaluating the impact of these standards on safety, the ASTM data sub-team sought to monitor injuries associated with liquid laundry packets before, during, and after implementation of the standards, for which CPSC staff agreed to provide data reporting. In October 2017, CPSC staff prepared and presented its report to ASTM, detailing the estimated injuries associated with liquid laundry packets and seen in emergency departments that occurred in the pre-implementation period (defined by the ASTM data sub-team as July 2012 to June 2013).[1] In February and March 2018, CPSC staff prepared and presented its report to ASTM, describing the estimated injuries associated with liquid laundry packets and seen in emergency departments in the transition period (July 2013 to December 2016). In June 2018, CPSC staff followed up with its report to ASTM describing the estimated injuries associated with liquid laundry packets seen in emergency departments in the post-implementation period (January 2017 to December 2017). [2] This letter constitutes the fourth report and provides additional information for the post-implementation period, namely 2018. The reportfocuses on comparing the pre-implementation period with the post-implementation period. CPSC staff anticipates providing a future report, as data become available, which will describe the estimated injuries in 2019.

Method

The National Electronic Injury Surveillance System (NEISS) is a national stratified probability sample of hospitals in the United States and its territories. There are five strata in the NEISS: children's hospitals, small hospitals, medium hospitals, large hospitals, and very large hospitals. Within each stratum is a sample of hospitals that make up the primary sampling units (PSUs) of NEISS. For each hospital in the sample, every emergency-department visit associated with a consumer product is recorded. To facilitate injury estimates associated with a product or product group, each injury has a product code that identifies the type of product involved. Information recorded for each injury includes sex, age, diagnosis, disposition, body part, and a brief narrative description of the injury, among other information. The information on stratum, hospital, age, and sex of the patient is known for all observations in this study. You can find additional information about NEISS online at: http://www.cpsc.gov/library/neiss.html.

To identify emergency department-treated injuries associated with liquid laundry packets, CPSC staff searched the following product codes: 949 (Laundry soaps or detergents), 976 (Detergents, not specified), 983 (Soaps, excluding laundry soaps or detergents), and 934 (Dishwasher detergents). Although some of these codes would not appear to be relevant to liquid laundry packets, upon review of the narrative description, staff identified cases indicating the involvement of liquid laundry packets. The ASTM data sub-team determined that the focus of the analysis would be on children under age 6; however, estimates for the population under age 5 are included here, as well, because that is a population of particular concern to CPSC, and it is a critical age threshold in the Poison Prevention Packaging Act.

[1] The report can be found at: https://cpsc.gov/s3fs-public/Liquid-Laundry-Packets-baseline.pdf

[2] The report can be found at: https://www.cpsc.gov/s3fs-public/Liquid-Laundry-Packets-postimplementation-period-report.pdf

Estimated Emergency Department Visits by Children

Tables 1a - 1e include the estimated emergency department visits for children under age 5, children under age 6, and for all ages. The "N" refers to the number of cases used to produce the estimate, and the "C.V." refers to the coefficient of variation for the estimate. Most of the injuries occurred to children under age 5, which is why the three figures are so often similar, and at times, identical. To look at shorter periods than the initial baseline period, 6-month periods are also provided so they can be viewed independently. The focus is on comparing the pre-implementation period with the post-implementation period. Hence, no statistical tests were conducted comparing the transitional period. In addition, for brevity, the estimates for the 6-month intervals that comprise the transition period have been excluded here, but are available in prior reports. Most of the injuries to children under age 5 and under age 6 resulted from ingestions. For 2018, none of the injury groups occurred with sufficient frequency to produce statistically stable semiannual estimates. Ocular injuries were combined with ingestions to allow for both to be considered semiannually when evaluating the voluntary standards. The differences in population-adjusted injury rates between pre-implementation and post-implementation in both annual periods and semiannual periods presented in tables 5a - 5c were not statistically significant.

Table 1a. Estimated Emergency-Department Visits Associated with Liquid Laundry Packets by Age Group and Time Period – All Injuries

Time period	Under Age 5			Under Age 6			All Ages		
	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.
7/2012 - 6/2013 (Pre-Implementation)	166	4,200	0.199	172	4,300	0.208	180	4,500	0.197
1/2017 – 12/2017 (Post-Implementation)	**161**	**3,900**	**0.202**	**171**	**4,200**	**0.190**	**204**	**5,300**	**0.168**
1/2018 – 12/2018 (Post-Implementation)	**145**	**3,300**	**0.162**	**151**	**3,500**	**0.155**	**177**	**4,400**	**0.143**
7/2012 -12/2012	82	2,300	0.228	84	2,400	0.244	85	2,400	0.242
1/2013 - 6/2013	84	1,900	0.233	88	1,900	0.230	95	2,200	0.199
1/2017 – 6/2017	**90**	**2,400**	**0.268**	**92**	**2,400**	**0.267**	**108**	**2,900**	**0.217**
7/2017 – 12/2017	**71**	**1,600**	**0.271**	**79**	**1,800**	**0.241**	**96**	**2,400**	**0.225**
1/2018 – 6/2018	**67**	**1,500**	**0.223**	**70**	**1,700**	**0.207**	**81**	**2,000**	**0.197**
7/2018 – 12/2018	**78**	**1,800**	**0.173**	**81**	**1,800**	**0.171**	**96**	**2,400**	**0.159**

[+]Injury estimates are rounded to the nearest 100 and may not sum to totals due to rounding.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 1b. Estimated Emergency-Department Visits Associated with Liquid Laundry Packets by Age Group and Time Period – Ingestions

Time period	Under Age 5			Under Age 6			All Ages		
	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.
7/2012 - 6/2013 (Pre-Implementation)	138	3,300	0.197	139	3,400	0.197	139	3,400	0.197
1/2017 – 12/2017 (Post-Implementation)	**103**	**2,900**	**0.206**	**106**	**2,900**	**0.205**	**108**	**3,000**	**0.200**
1/2018 – 12/2018 (Post-Implementation)	**82**	**1,900**	**0.204**	**82**	**1,900**	**0.204**	**83**	**1,900**	**0.204**
7/2012 - 12/2012	67	1,800	0.237	67	1,800	0.237	67	1,800	0.237
1/2013 - 6/2013	71	1,500	0.236	72	1,500	0.236	72	1,500	0.236
1/2017 – 6/2017	**62**	**1,800**	**0.281**	**62**	**1,800**	**0.281**	**63**	**1,900**	**0.272**
7/2017 – 12/2017	**41**	**	**	**44**	**	**	**45**	**	**
1/2018 – 6/2018	**39**	**	**	**39**	**	**	**40**	**	**
7/2018 – 12/2018	**43**	**	**	**43**	**	**	**43**	**	**

[+]Injury estimates are rounded to the nearest 100 and may not sum to totals due to rounding.
**Does not meet NEISS criteria of at least 1,200 for publication of an estimate.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 1c. Estimated Emergency-Department Visits Associated with Liquid Laundry Packets by Age Group and Time Period – Ocular Injuries

Time period	Under Age 5			Under Age 6			All Ages		
	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.
7/2012 - 6/2013 (Pre-Implementation)	27	**	**	32	**	**	40	**	**
1/2017 – 12/2017 (Post-Implementation)	**54**	**	**	**61**	**1,200**	**0.211**	**86**	**2,000**	**0.178**
1/2018 – 12/2018 (Post-Implementation)	**56**	**1,300**	**0.113**	**61**	**1,400**	**0.100**	**79**	**2,100**	**0.077**

[+]Injury estimates are rounded to the nearest 100 and may not sum to totals due to rounding.
**Does not meet NEISS criteria of at least 1,200 for publication of an estimate.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 1d. Estimated Emergency-Department Visits Associated with Liquid Laundry Packets by Age Group and Time Period – Ingestions/Ocular Injuries

Time period	Under Age 5			Under Age 6			All Ages		
	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.
7/2012 - 6/2013 (Pre-Implementation)	165	4,200	0.199	171	4,300	0.208	178	4,500	0.201
1/2017 – 12/2017 (Post-Implementation)	**157**	**3,900**	**0.203**	**167**	**4,100**	**0.192**	**194**	**5,000**	**0.170**
1/2018 – 12/2018 (Post-Implementation)	**138**	**3,200**	**0.161**	**143**	**3,400**	**0.154**	**162**	**4,000**	**0.151**
7/2012 - 12/2012	82	2,300	.228	84	2,400	0.244	85	2,400	0.242
1/2013 - 6/2013	83	1,900	0.233	87	1,900	0.231	93	2,100	0.218
1/2017 – 6/2017	**88**	**2,400**	**0.269**	**90**	**2,400**	**0.268**	**102**	**2,700**	**0.234**
7/2017 – 12/2017	**69**	**1,500**	**0.276**	**77**	**1,800**	**0.245**	**92**	**2,200**	**0.230**
1/2018 – 6/2018	**63**	**1,400**	**0.226**	**66**	**1,500**	**0.210**	**74**	**1,700**	**0.213**
7/2018 – 12/2018	**75**	**1,800**	**0.174**	**77**	**1,800**	**0.173**	**88**	**2,300**	**0.165**

[+]Injury estimates are rounded to the nearest 100 and may not sum to totals due to rounding.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 1e. Estimated Emergency-Department Visits Associated with Liquid Laundry Packets by Age Group and Time Period – Dermal Injuries

Time period	Under Age 5			Under Age 6			All Ages		
	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.	N	Est. ED Visits[+]	C.V.
7/2012 - 6/2013 (Pre-Implementation)	1	**	**	1	**	**	2	**	**
1/2017 – 12/2017 (Post-Implementation)	**4**	****	****	**4**	****	****	**10**	****	****
1/2018 – 12/2018 (Post-Implementation)	**5**	****	****	**6**	****	****	**10**	****	****

[+]Injury estimates are rounded to the nearest 100 and may not sum to totals due to rounding.
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Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Sales Data and Injury Rates

CPSC received aggregated point-of-sale data from Nielsen via the Rocky Mountain Poison and Drug Center. The data provided context necessary to determine changes in injury risks. Table 2 shows the sales in units (which is a single package sold that can include multiple laundry packets), and in total number of packets. The data are compiled in 4-week intervals, and thus, the data can be aggregated similarly (but not identically) to the periods of interest.

Table 2. Sales of Laundry Packets by Unit and Total Number of Packets by Time Period

Time Periods	Units (in millions)	Number of Packets (in millions)
6/24/2012 - 6/22/2013 (Pre-Implementation)	58.075	2,051
1/1/2017 – 12/30/2017 (Post-Implementation)	**131.760**	**4,706**
12/31/2017 – 12/30/2018 (Post-Implementation)	**136.337**	**4,915**
6/24/2012 - 1/5/2013	30.054	1,044
1/6/2013 - 6/22/2013	28.021	1,007
1/1/2017 – 6/17/2017	**62.540**	**2,200**
6/18/2017 – 12/30/2017	**69.220**	**2,506**
12/31/2018 – 6/17/2018	**60.479**	**2,242**
6/18/2018 – 12/30/2018	**75.858**	**2,673**

Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Tables 3a – 3c combine the unrounded emergency department-visit estimates used to produce Tables 1a – 1e, with the sales figures in Table 2, to produce emergency department-visit rates per million units sold, and per million packets sold. When sales are considered, the differences in ED visit rates per unit and per packet between the baseline period and the post-transition period were statistically significant for each age grouping.

Table 3a. Estimated Emergency Department-Visit Rates by Units and Total Number of Packets Sold - All Injuries

Time period	Under Age 5		Under Age 6		All Ages	
	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets
7/2012 - 6/2013 (Pre-Implementation)	72	2.0	74	2.1	78	2.2
1/2017 - 12/2017 (Post-Implementation)	**30***	**0.8***	**32***	**0.9***	**40***	**1.1***
1/2018 - 12/2018 (Post-Implementation)	**24***	**0.7***	**26***	**0.7***	**32***	**0.9***
7/2012 -12/2012	76	2.2	79	2.3	79	2.3
1/2013 - 6/2013	68	1.9	69	1.9	77	2.1
1/2017 - 6/2017	**38**	**1.1**	**38**	**1.1**	**46**	**1.3**
7/2017 - 12/2017	**23***	**0.6***	**26***	**0.7***	**35***	**1.0***
1/2018 - 6/2018	**25***	**0.7***	**28***	**0.7***	**33***	**0.9***
7/2018 - 12/2018	**23***	**0.7***	**24***	**0.7***	**32***	**0.9***

*Indicates a statistically significant difference from the baseline July 2012 to June 2013 period.
**Does not meet NEISS criteria of at least 1,200 for publication of an estimate.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 3b. Estimated Emergency Department-Visit Rates by Units and Total Number of Packets Sold - Ingestions

Time period	Under Age 5		Under Age 6		All Ages	
	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets
7/2012 - 6/2013 (Pre-Implementation)	58	1.6	58	1.6	58	1.6
1/2017 - 12/2017 (Post-Implementation)	**22***	**0.6***	**22***	**0.6***	**23***	**0.6***
1/2018 - 12/2018 (Post-Implementation)	**14***	**0.4***	**14***	**0.4***	**14***	**0.4***
7/2012 - 12/2012	60	1.7	60	1.7	60	1.7
1/2013 - 6/2013	55	1.5	55	1.5	55	1.5
1/2017 - 6/2017	**29***	**0.8***	**29***	**0.8***	**31***	**0.9***
7/2017 - 12/2017	**	**	**	**	**	**
1/2018 - 6/2018	**	**	**	**	**	**
7/2018 - 12/2018	**	**	**	**	**	**

*Indicates a statistically significant difference from the baseline July 2012 to June 2013 period.
**Does not meet NEISS criteria of at least 1,200 for publication of an estimate.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 3c. Estimated Emergency Department-Visit Rates by Units and Total Number of Packets Sold – Ingestions/Ocular Injuries

Time period	Under Age 5		Under Age 6		All Ages	
	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets	Est. ED Visits per 1 million units	Est. ED Visits per 1 million packets
7/2012 - 6/2013 (Pre-Implementation)	72	2.0	74	2.1	77	2.1
1/2017 - 12/2017 (Post-Implementation)	**30***	**0.8***	**31***	**0.9***	**38***	**1.1***
1/2018 - 12/2018 (Post-Implementation)	**24***	**0.7***	**25***	**0.7***	**31***	**0.9***
7/2012 - 12/2012	76	2.2	79	2.3	79	2.3
1/2013 - 6/2013	68	1.9	68	1.9	74	1.9
1/2017 - 6/2017	**38**	**1.1**	**38**	**1.1**	**44**	**1.2**
7/2017 - 12/2017	**22***	**0.6***	**25***	**0.7***	**32***	**0.9***
1/2018 - 6/2018	**23***	**0.6***	**25***	**0.7***	**28***	**0.8***
7/2018 - 12/2018	**24***	**0.7***	**24***	**0.7***	**31***	**0.9***

*Indicates a statistically significant difference from the baseline July 2012 to June 2013 period.
**Does not meet NEISS criteria of at least 1,200 for publication of an estimate.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Figure 1 presents the estimated emergency department-visit rates per unit and per packet for each 6-month period for all ages for all types of injuries. Figure 2 presents the estimated emergency department rates per unit and per packet for each reportable 6-month period for all ages for ingestions and ocular injuries only.

Figure 1. Estimated Emergency Department-Visit Rates by Unit and Total Number of Packets Sold for All Injuries (All Ages)

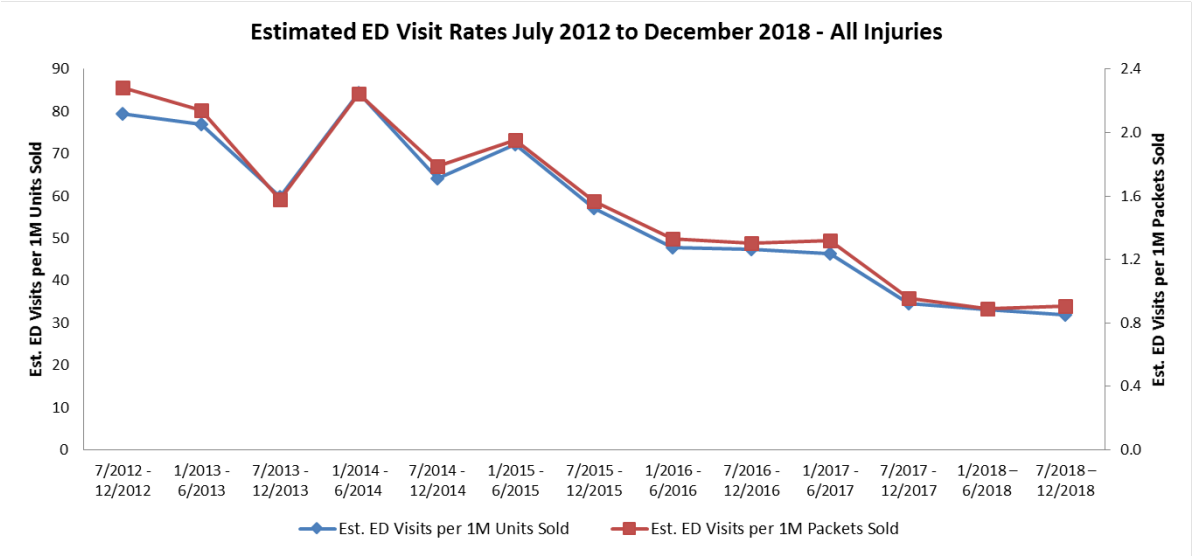
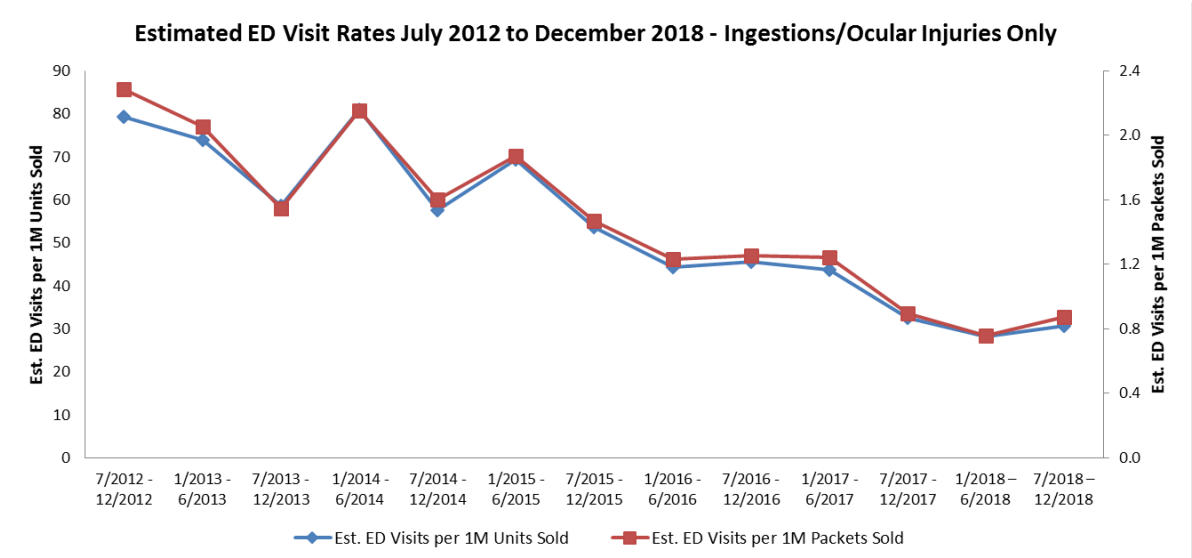


Figure 2. Estimated Emergency Department.-Visit Rates by Unit and Total Number of Packets Sold for Ingestions/Ocular Injuries (All Ages)



Population Data and Injury Rates

Table 4 shows the average population counts from U.S. Census Bureau in millions corresponding most closely to the 6-month time periods.[3]

Table 4. U.S. Resident Population by Age Category and Time Period (in millions)

Time Periods	Under Age 5	Under Age 6	All Ages
7/2012 - 6/2013 (Pre-Implementation)	19.934	24.063	314.937
1/2017 – 12/2018 (Post-Implementation)	19.849	23.858	326.108
7/2012 - 12/2013	19.964	24.096	314.419
1/2013 - 06/2013	19.904	24.029	315.454
1/2017 – 6/2017	19.910	23.924	324.578
7/2017 – 12/2017	19.869	23.874	325.622
1/2018 – 6/2018	19.823	23.838	326.588
7/2018 – 12/2018	19.792	23.797	327.642

Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

[3] The Monthly Postcensal Resident Population counts of 2018 can be found at: https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-detail.html

Tables 5a - 5c combine the unrounded emergency department-visit estimates used to produce Tables 1a – 1e, with the population figures in Table 4, to produce emergency department-visit rates per million persons of each age group (under 5, under 6, and all ages). The differences in population-adjusted injury rates between pre-implementation and post-implementation in both annual and semiannual periods were not statistically significant. The rates of emergency department-visits were much higher for children under age 5 and under age 6, than for all ages.

Table 5a. Estimated Emergency Department-Visit Population-Adjusted Injury Rates by Age and Time Period (Estimated ED Visits per 1 Million Population) – All Injuries

Time period	Under Age 5	Under Age 6	All Ages
7/2012 - 6/2013 (Pre-Implementation)	210.7	178.4	14.4
1/2017 - 12/2017 (Post-Implementation)	**198.0**	**174.5**	**16.3**
1/2018 - 12/2018 (Post-Implementation)	**168.6**	**147.5**	**13.5**
7/2012 -12/2012	114.9	98.4	7.6
1/2013 - 6/2013	95.2	79.8	6.8
1/2017 - 6/2017	**119.3**	**99.7**	**9.0**
7/2017 - 12/2017	**78.7**	**74.8**	**7.3**
1/2018 - 6/2018	**77.3**	**70.4**	**6.1**
7/2018 - 12/2018	**91.4**	**77.2**	**7.3**

Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 5b. Estimated Emergency Department-Visit Population-Adjusted Injury Rates by Age and Time Period (Estimated ED Visits per 1 Million Population) – Ingestions

Time period	Under Age 5	Under Age 6	All Ages
7/2012 - 6/2013 (Pre-Implementation)	167.8	139.3	10.6
1/2017 - 12/2017 (Post-Implementation)	**145.8**	**122.4**	**9.3**
1/2018 - 12/2018 (Post-Implementation)	**97.1**	**80.7**	**5.9**
7/2012 - 12/2012	90.9	75.3	5.8
1/2013 - 6/2013	75.4	63.9	4.9
1/2017 - 6/2017	**92.5**	**77.0**	**5.9**
7/2017 - 12/2017	**	**	**
1/2018 - 6/2018	**	**	**
7/2018 - 12/2018	**	**	**

**Does not meet NEISS criteria of at least 1,200 for publication of an estimate.
Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Table 5c. Estimated Emergency Department-Visit Population-Adjusted Injury Rates by Age and Time Period (Estimated ED Visits per 1 Million Population) – Ingestions/Ocular Injuries

Time period	Under Age 5	Under Age 6	All Ages
7/2012 - 6/2013 (Pre-Implementation)	210.1	178.2	14.2
1/2017 - 12/2017 (Post-Implementation)	**195.9**	**172.8**	**15.3**
1/2018 - 12/2018 (Post-Implementation)	**160.8**	**140.9**	**12.3**
7/2012 - 12/2012	114.9	98.4	7.6
1/2013 - 6/2013	95.2	79.8	6.6
1/2017 - 6/2017	**118.8**	**99.3**	**8.4**
7/2017 - 12/2017	**77.0**	**73.4**	**6.9**
1/2018 - 6/2018	**70.3**	**64.6**	**5.2**
7/2018 - 12/2018	**90.6**	**76.3**	**7.1**

Estimates for the baseline reporting period are shaded in gray, estimates for the post-implementation period are bolded.

Injury Severity

Table 6 shows the disposition for all of the injuries seen in the baseline period (July 2012 to June 2013). The treated-and-released category was the only one large enough to produce a publishable NEISS estimate. Therefore, only percentages are shown.

Table 6. Disposition of Estimated Emergency-Department Visits Associated with Liquid Laundry Packets for Different Age Groups July 2012 to June 2013

Disposition	Under Age 5	Under Age 6	All Ages[+]
Treated and Released	82%	83%	84%
Admitted, Transferred	12%	11%	11%
Held for Observation	3%	3%	3%
Left Without Being Seen	3%	3%	3%

[+]Percentages may not total 100 due to rounding.

Table 7 shows the disposition for all of the injuries seen in the post period (January 2017 to December 2018). The treated-and-released category was the only one large enough to produce a publishable NEISS estimate. Therefore, only percentages are shown. The decline in the proportion of emergency-department visitors who were admitted to the hospital or transferred showed a statistically significant decline for each age group.

Table 7. Disposition of Estimated Emergency-Department Visits Associated with Liquid Laundry Packets for Different Age Groups January 2017 to December 2018

Disposition	Under Age 5	Under Age 6[+]	All Ages[+]
Treated and Released	91%	92%	93%
Admitted, Transferred	4%	4%	3%
Held for Observation	1%	1%	1%
Left Without Being Seen	3%	3%	2%

[+]Percentages may not total 100 due to rounding.

Fatalities

CPSC is aware of one fatality in the baseline period July 2012 to June 2013 (an elderly woman with Alzheimer's, who died after ingesting liquid laundry packets). CPSC is aware of seven additional fatalities in the United States between July 2013 and December 2016, including two involving children under 2 years of age and five adults. All of the victims had ingested at least one liquid laundry packet. The adult victims all suffered from Alzheimer's or dementia. The two children died in 2013, three adults died in 2014, one adult died in 2015, and another adult died in 2016. CPSC is aware of three fatalities in the post-implementation period January 2017 to December 2018. In 2017, an elderly man who reportedly lacked full mental capacity and may have been exposed to outdated packaging ingested a liquid laundry packet. Since the last report, CPSC received a second fatality report from 2017. An elderly man with chronic obstructive pulmonary disease thought the liquid laundry packet was candy and ingested it, then died a month later. In 2018, a 43-year-old man, who may have been associated with pica, ingested liquid laundry packets and died of detergent toxicity.