



# **Toy-Related Deaths and Injuries Calendar Year 2019**

Angie Qin  
Division of Hazard Analysis  
Directorate for Epidemiology  
U.S. Consumer Product Safety Commission  
4330 East West Highway  
Bethesda, MD 20814  
November 2020

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

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## Executive Summary

In this report, U.S. Consumer Product Safety Commission (CPSC) staff presents the latest available statistics on deaths and emergency department-treated injuries associated with toys. For toy-related deaths and injuries, it is important to note that although a toy was associated with many of the incidents, the toy was not necessarily the cause of the death or injury. Additionally, due to delays in death certificate reporting, fatality information is not yet complete for 2017, 2018, or 2019.

### Reported Toy-Related Fatalities in Calendar Year 2019

- CPSC staff received reports of 14 toy-related deaths that occurred in the 2019 calendar year among children 14 years of age or younger.
- Nonmotorized scooters were associated with five of the 14 fatalities: four deaths were due to motor vehicle involvement, and one death was due to a fall. Small plastic balls were involved in four fatalities, due to airway obstruction.

### Emergency Department-Treated Toy-Related Injuries in Calendar Year 2019<sup>1</sup>

- An estimated 224,200 toy-related injuries were treated in U.S. hospital emergency departments in 2019, and males accounted for 59 percent of the injuries.
- Of the 224,200 estimated toy-related, emergency department-treated injuries, an estimated 73 percent happened to children 14 years of age or younger; 70 percent occurred to children 12 years of age or younger; and 35 percent happened to children 4 years of age or younger.<sup>2</sup>
- Forty-one percent of the estimated emergency department-treated injuries were classified as lacerations, contusions, or abrasions. Forty-six percent of the estimated injuries were to the head and face area, the most commonly affected area of the body.
- Ninety-four percent of the emergency department-treated, toy-related injury victims were treated and released.
- Nonmotorized scooters were associated with the most estimated injuries among the specifically identified toys for children 12 years of age or younger and children 14 years of age or younger (21 percent and 22 percent, respectively).

### Emergency Department-Treated Toy-Related Injuries from 2015 to 2019

- Staff observes a statistically significant decreasing trend in the estimated number of injuries associated with nonmotorized scooters from 2015 to 2019, for children 12 years of age or younger, children 14 years of age or younger, and all ages.

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<sup>1</sup> The percentages are calculated from the unrounded injury estimates.

<sup>2</sup> All toys intended for use by children 12 years of age and under must be third party tested and be certified in a [Children's Product Certificate](#) as compliant with the federal toy safety standard enacted by Congress, and to other applicable requirements as well. Additional age breaks are provided in this report to describe hazards to older and younger children, as we provided in prior reports.

## Introduction

This report provides updated summary information on toy-related fatalities for the years 2017 and 2018, along with detailed information on toy-related fatalities for 2019. CPSC staff bases fatality counts on reports obtained from the CPSC databases—Consumer Product Safety Risk Management System (CPSRMS) and the National Electronic Injury Surveillance System (NEISS). In addition, staff presents in this report the estimated emergency department-treated injuries associated with toys for the 2019 calendar year and the injury estimates from 2015 to 2019, based on the NEISS. In Appendix A, staff presents historical estimated toy-related, emergency department-treated injuries from 2011 to 2019, along with the coefficient of variations for the injury estimates. Appendix B lists the NEISS product codes used to generate this report.

## Toy-Related Deaths<sup>3</sup>

Tabel 1 summarizes fatalities of children 14 years of age or younger that were associated with a toy and that occurred from 2017 to 2019, as reported to CPSC staff. The reported death totals for each year and age groups are listed at the top of the table, with each year's reported deaths detailed by the type of toy, with a parenthetical description of the hazard in the rows that follow. Table 1 also lists toy types that are associated with more than one death that happened in the period 2017 to 2019, to highlight the toys (and associated hazards). For other types of toys associated with only one fatality across the 3 years, the information is summarized in the final row of the table. Staff considered fatalities in-scope if a toy was present, and based on statements by investigators, police, family members, or medical examiners, the toy may have played a contributing role in the death.

Due to delays in death certificate reporting, fatality information is not yet complete for 2017, 2018, or 2019. At the time of data extraction for this report, death certificate reporting was 98 percent, 90 percent, and 51 percent complete for 2017, 2018, and 2019, respectively.<sup>4</sup> The data for 2017 and 2018 have been updated to include the eight new incident reports CPSC staff received—two fatalities that occurred in 2017, and six fatalities that occurred in 2018. Thus, the data differ from the reported fatality tabulations detailed in the previous report for the calendar year 2018.<sup>5</sup> Of the eight newly reported fatalities, three incidents involved choking on a toy (a rubber ball, a toy portion of a pacifier, and a toy dart); one incident involved ingesting a small plastic ball; one incident involved suffocation by a foil balloon; one incident involved strangulation by a kite string; one incident involved positional asphyxia, where the child was covered by toys and soft bedding; and one incident involved toy-associated drowning. The children ranged in age from 5 months to 6 years.

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<sup>3</sup> These fatalities do not represent a sample of known probability of selection.

<sup>4</sup> Staff measured the reporting percent as the number of months for each state, where at least one death certificate was received, divided by 600 (50 states multiply by 12 months).

<sup>5</sup> Tu, Y. "Toy-Related Deaths and Injuries, Calendar Year 2018," CPSC, October 2019.

**Table 1: Reported Toy-Related Deaths Among Children 14 Years of Age or Younger  
2017–2019**

Type of Toy (Hazard)	2017 <sup>6</sup>		2018 <sup>7</sup>		2019	
	Children 12 Years of Age or Younger <sup>‡</sup>	Children 13 and 14 Years of Age	Children 12 Years of Age or Younger <sup>‡</sup>	Children 13 and 14 Years of Age	Children 12 Years of Age or Younger <sup>‡</sup>	Children 13 and 14 Years of Age
<b>TOTAL</b>	<b>16</b>		<b>23</b>		<b>14</b>	
<b>Sub Total</b>	<b>16</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>13</b>	<b>1</b>
Nonmotorized scooters (motor vehicle involvement or fall)	4		3		4	1
Stuffed toys/doll/doll accessory/toy figure (hanging, airway obstruction, suffocation, mechanical asphyxia)	3		2			
Tricycles (motor vehicle involvement, drowning)	3					
Rubber balls (drowning, aspiration, airway obstruction)	1		3			
Balls, other (drowning, airway obstruction, ingestion)	3		1		4	
Nonmotorized riding toys (motor vehicle involvement, drowning)			2			
Water toys (drowning)			2		1	
Toy chest (suffocation)					1	
Toy dart (airway obstruction)			2			
Balloons/balloon strings (asphyxia/suffocation, airway obstruction)	1		2			
Other toys with a single reported fatality in the year (airway obstruction, mechanical asphyxia, hanging, battery ingestion, drowning, electrocution)	1		6		3	

Source: CPSRMS and NEISS from 1/1/2017 to 12/31/2019; CPSC. Data were extracted in July 2020.

<sup>‡</sup> Toy-related deaths among children 12 years of age or younger are presented separately to be consistent with the age definition of a children’s product in the Consumer Product Safety Improvement Act of 2008 (CPSIA), 15 U.S.C. § 2052 (a)(2).

<sup>6</sup> Two new toy-related deaths were reported to CPSC that occurred in the 2017 calendar year, increasing the number of reported deaths to 16 in 2017.

<sup>7</sup> Six new toy-related deaths were reported to CPSC that occurred in the 2018 calendar year, increasing the number of reported deaths to 23 in 2018.

Table 2 details the fatalities associated with toys for children 14 years of age or younger in 2019 that were reported to CPSC. The toy types and associated hazards involved in these reported fatalities are presented in descending order of the frequency of fatal incidents.

**Table 2: Reported Toy-Related Deaths Among Children 14 Years of Age or Younger  
2019**

Type of Toy	Children 12 Years of Age or Younger <sup>¥</sup>	Children 13 and 14 Years of Age
<b>TOTAL</b>	<b>14</b>	
<b>Sub Total</b>	<b>13</b>	<b>1</b>
Nonmotorized Scooters (motor vehicle involvement, fall)	4	1
Balls, Other (airway obstruction)	4	
Toy Chest (suffocation)	1	
Water Toy (drowning)	1	
Rock Shaped Toy (airway obstruction)	1	
Rock from a Construction Set (airway obstruction)	1	
Toy Ring (airway obstruction)	1	

Source: CPRMS and NEISS from 1/1/2019 to 12/31/2019; CPSC. Data were extracted in July 2020.

<sup>¥</sup> Toy-related deaths among children 12 years of age or younger are presented separately to be consistent with the age definition of a children's product in the Consumer Product Safety Improvement Act of 2008 (CPSIA), 15 U.S.C. § 2052 (a)(2).

Of the above 14 toy-related fatalities, three victims were known to be females, and 11 were males. The children ranged in age from 7 months to 13 years. The scenario-specific details of these incidents are presented below.

### **Nonmotorized Scooters**

Five boys—ages 2 to 13 years—four were struck and killed by motor vehicles while riding nonmotorized scooters, and one died after falling from a nonmotorized scooter.

- A 2-year-old boy was being pushed on a ride scooter by an older child. When the older child was turning the scooter, the 2-years-old child fell off and hit his head; he was not wearing a helmet. EMS responded, and the boy was transported to the hospital, where he later died.
- A 3-year-old boy died after being struck by a commercial van. The 61-years-old driver was attempting to make a right turn when the van struck the 3-year-old. The child was riding his scooter in a marked crosswalk when he was hit. His mother was behind him holding an infant in her arms. The child was transported to a hospital, where he was pronounced dead. His mother sustained non-life threatening injuries.
- An 8-year-old boy was killed on a scooter, due to a vehicle collision at an intersection. The boy was on his scooter and crossing a street when he was hit by a sedan. An emergency medical technician, police, and firefighters arrived at the scene within minutes and began rendering aid to child, but the child did not survive.
- A 12-year-old boy was riding a prone-style scooter on the street when he was struck by a dump truck. Cause of death was blunt force injuries to head and pelvis.

- A 13-year-old boy was struck and killed by a pickup truck while riding a scooter and attempting to cross the street.

### **Balls, Other**

Three boys and a girl—ages 7 months to 7 years—died of airway obstruction due to a plastic ball.

- A 7-month-old boy was found by family choking on an object while playing with his brother. EMS transported the victim to the ER; they removed a 3 centimeter (cm) hard plastic ball from his airway. The victim was pronounced deceased at the hospital, and the medical examiner concluded that the victim died as a result of apparently choking on a foreign object.
- A 16-month-old girl placed a small, round, toy object in her mouth and inhaled when the mother reached to remove the toy. The mother and police were not able to remove the object from her throat. She was transported to the hospital, where she expired.
- A 20-month-old boy with a history of chronic bronchitis became unresponsive at home. He was taken to a local hospital, where he was pronounced dead. An autopsy revealed that a small, blue plastic ball obstructed the victim's airway. The cause of death was ruled to be complications from foreign object inhalation with a contributing factor of chronic bronchitis.
- A 7-year-old boy with developmental delays was found by mother to have trouble breathing. EMS transported the boy to the hospital, where he became unresponsive. Chest compressions dislodged a small, plastic ball, about 3 cm. Cause of death was apparent aspiration of foreign object.

### **Toy Chests**

- A 3-year-old girl died as a result of asphyxia after becoming entrapped in a homemade toy box/ chest, which was designed and constructed by a family member as a treasure chest for her to store her dress-up clothes.

### **Water Toy**

A 2-year-old boy drowned in a residential, in-ground swimming pool. The victim was unsupervised and was seen on security camera footage entering the pool feet first in an attempt to get an inflatable toy. No one else was in the pool area. The victim was found floating face down by his mother, approximately 35 minutes after entering the pool. The official cause of death was determined to be drowning.

### **Rock-Shaped Toy**

A 3-year-old boy was found cold and unresponsive in his bed. Emergency medical services responded to a 911 call and determined that the victim was deceased. An autopsy revealed a small, gray plastic, rock-shaped toy was completely blocking the victim's proximal airway. The cause of death was asphyxiation due to suffocation, and the manner of death was accidental.

### **Rock from a Construction Set**

A 3-year-old boy passed from choking on one of the rocks from a 12-piece construction play set.

### **Toy Ring**

A 2-year-old girl was heard choking by her mother, who could not dislodge the object and called 911. The mother stated she believed that her daughter choked on a pink toy, diamond-shaped lip gloss

ring and that the victim disassembled the toy before swallowing it. The victim was pronounced deceased at the hospital 3 days later, and the cause of death was anoxic brain injury asphyxia due to foreign body internal airway occlusion.

## Estimated Toy-Related Injuries<sup>8</sup>

In 2019, an estimated 224,200 toy-related injuries for all ages were treated in U.S. hospital emergency departments, and males accounted for 59 percent of the injuries. Most of the victims (94 percent) were treated and released from the hospital. Four percent of the victims were admitted to the hospital or transferred to another hospital. The remaining 2 percent were held for observation or left without being seen by a doctor.

Table 3 presents the estimated toy-related, emergency department-treated injuries in 2019, for different age groups. Of the estimated 224,200 toy-related injuries, 73 percent were sustained by children 14 years of age or younger; 70 percent were sustained by children 12 years of age or younger; and 35 percent were sustained by children 4 years of age or younger.

**Table 3: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups  
2019**

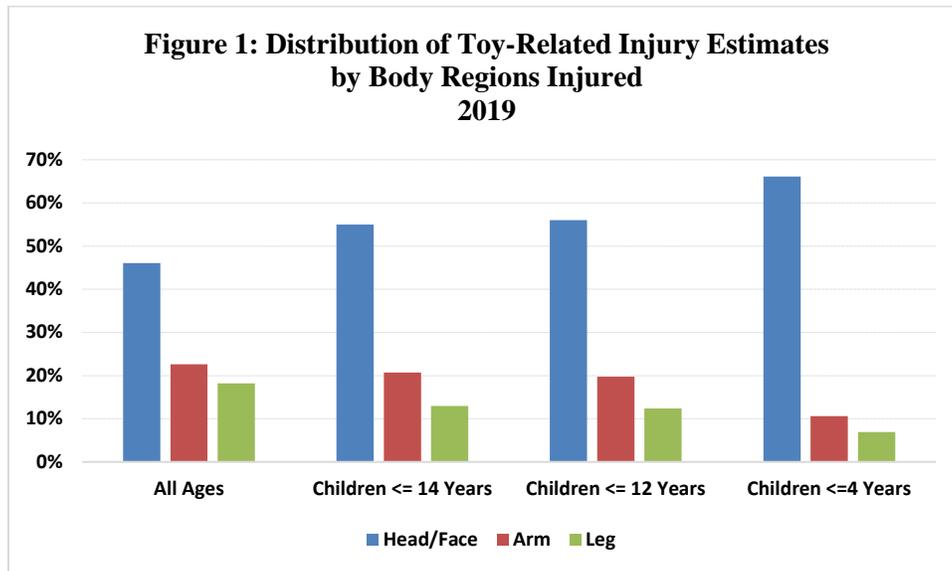
Age Groups	All Ages	14 Years of Age or Younger	12 Years of Age or Younger <sup>‡</sup>	4 Years of Age or Younger
Injury Estimates	224,200	162,700	154,700	78,700
Injuries per 100,000 People	68	269	296	402

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100. Population estimate for 2019 is from [Annual Estimates of the Resident Population by Single Year of Age and Sex: April 1, 2010 to July 1, 2019, U.S. Census Bureau, Population Division. Release Date: June 2020.](#)

<sup>‡</sup> Toy-related injury estimates among children 12 years of age or younger are presented separately to be consistent with the age definition of a children's product in the Consumer Product Safety Improvement Act of 2008 (CPSIA), 15 U.S.C. § 2052 (a)(2).

<sup>8</sup> The source of these data is NEISS, which is based on a statistical sample of hospital emergency department-treated injuries. For a description of which cases are included in NEISS, how they are coded, and an alphabetical listing of products with current product codes, please see NEISS Coding Manual at: <https://www.cpsc.gov/s3fs-public/2020-CPSC-Only-Non-Trauma-Coding-Manual.pdf?C5XcvE7j6thz0xPeXqo853nA0vHRamqJ>

Figure 1 presents the distribution of the 2019 annual estimated toy-related, emergency department-treated injuries by the specific parts of the body most frequently injured for different age groups.<sup>9,10</sup> As shown in Figure 1, the head/face regions were the parts of the body associated with the largest number of estimated toy-related injuries in 2019 for all four age groups specified, followed by arms and legs.



Source: NEISS, U.S. Consumer Product Safety Commission.

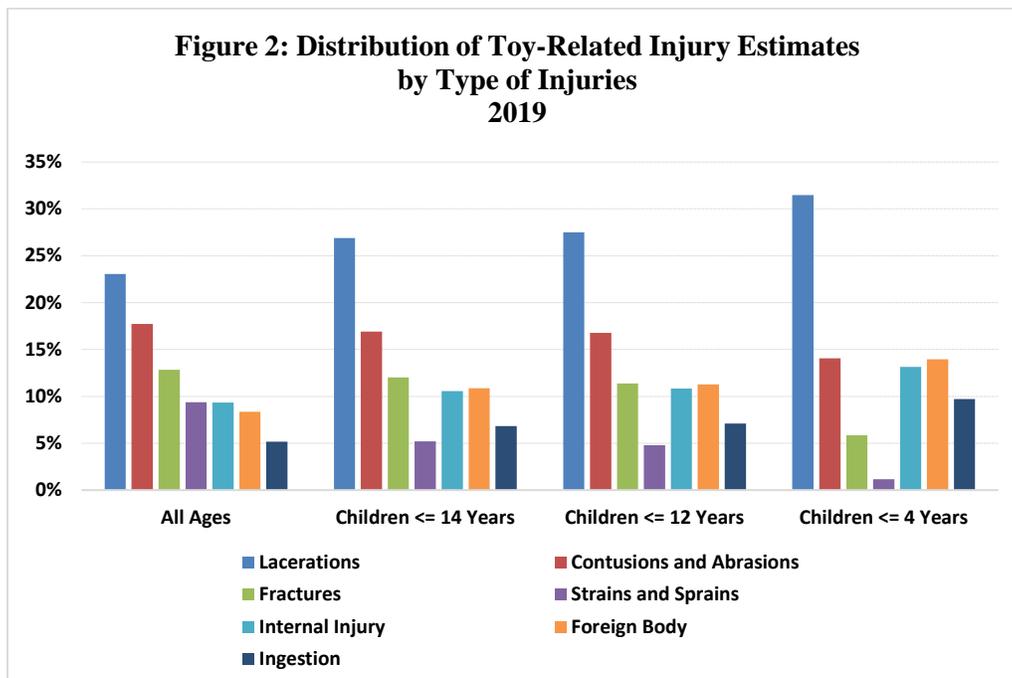
<sup>‡</sup> Head/Face regions include NEISS codes for head, eyelid, eye area, nose, eyeball, mouth, and ear. Arm includes upper arm, elbow, lower arm, shoulder, wrist, hand, and finger. Leg includes upper leg, knee, lower leg, ankle, foot, and toe.

Figure 2 shows the distribution of the annual estimated toy-related emergency department-treated injuries by the type of injuries diagnosed most frequently for different age groups.<sup>11</sup> For all four age groups, lacerations was the diagnosis associated the largest number of estimated toy-related injuries in 2019, followed by contusions/abrasions. Fractures ranked the third, with the largest number of toy-related injuries for all age groups, except for children 4 years of age or younger. For children 4 years of age or younger, internal injury, foreign body, and ingestion each accounted for more estimated toy-related injuries than fractures.

<sup>9</sup> In October 2018, CPSC upgraded the NEISS system. As a result of this upgrade, an emergency-department visit is allowed to contain up to two codes for the body part injured and the diagnoses. In 2019, less than 2 percent of the toy-related injury cases in NEISS had two codes of body part injured or diagnosis.

<sup>10</sup> If either of the two codes listed a specific body part (as opposed to an unspecified body part), staff classifies that body part as being injured in the incident for the data analysis purpose.

<sup>11</sup> If either of the two codes lists a specific diagnosis (type of injury), staff classifies that diagnosis as being the type of injury for the data analysis purpose.



Source: NEISS, U.S. Consumer Product Safety Commission.

Table 4 presents the toy categories that were associated the largest number of injuries in 2019 for different age groups. Nonmotorized scooters and toy balls were the specifically identified toy categories that accounted for the most injuries for all age groups, except for 4 years of age or younger. For children 4 years of age or younger, toy vehicles and building sets were the specifically identified toy categories related to the most estimated toy-related injuries.

**Table 4: Toy Categories Associated with the Largest Number of Estimated Emergency Department-Treated Injuries for Different Age Groups 2019**

Toy Category	Estimated Injuries (% of Total Estimates <sup>‡</sup> )			
	All Ages	14 Years of Age or Younger	12 Years of Age or Younger	4 Years of Age or Younger
Toys, Not Specified	52,300 (23)	32,600 (20)	31,900 (21)	23,600 (30)
Nonmotorized Scooters	45,400 (20)	35,600 (22)	32,800 (21)	4,700 (6)
Toy Balls	23,200 (10)	16,400 (10)	14,700 (10)	4,200 (5)
Toy Vehicles	11,000 (5)	8,300 (5)	8,100 (5)	6,000 (8)
Building Sets	9,600 (4)	8,900 (5)	8,900 (6)	5,700 (7)

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100.

<sup>‡</sup> Percentages are calculated from the unrounded injury estimates and then rounded to the nearest integer.

Nonmotorized scooters continued to be the category of toys associated with the most injuries for children 14 years of age or younger, and for children 12 years of age or younger in 2019. Table 5 displays the annual estimated emergency department-treated injuries associated with nonmotorized scooters and the percentages of injury estimates for all ages, 14 years of age or younger, 12 years of age or younger, and 4 years of age or younger from 2015 to 2019. There is a statistically significant decreasing trend in the estimated injuries related to nonmotorized scooters for all ages, 14 years of age or younger, and 12 years of age or younger groups.<sup>12</sup>

**Table 5: Nonmotorized Scooter-Related Emergency Department-Treated Injury Estimates for Children of Different Age Groups 2015–2019**

Calendar Year	Estimated Injuries (% of Total Estimates) Associated with “Nonmotorized Scooter”			
	All Ages	14 Years of Age or Younger	12 Years of Age or Younger	4 Years of Age or Younger
2015	52,400 (21)	45,500 (25)	41,900 (24)	6,200 (7)
2016	48,000 (20)	39,800 (23)	36,600 (22)	5,700 (7)
2017	48,700 (19)	40,300 (22)	36,800 (21)	6,100 (7)
2018	39,500 (17)	31,700 (19)	28,800 (18)	4,900 (6)
2019	45,400 (20)	35,600 (22)	32,800 (21)	4,700 (6)

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100.

Toys that are identified, but that cannot be placed under already-established toy product codes, are likely to be coded under the product code “Toys, Not Elsewhere Classified.” Table 6 displays the estimated emergency department-treated injuries associated with this product code and the percentages of injury estimates for all ages, 14 years of age or younger, 12 years of age or younger, and 4 years of age or younger from 2015 to 2019. Table 6 shows that the proportions of the estimated injuries related to this product code have remained steady for all four age groups, and staff found no statistically significant trend between 2015 and 2019.<sup>13</sup>

<sup>12</sup> The p-values for all ages, 14 years of age or younger, 12 years of age or younger, and 4 years of age or younger groups were 0.04, 0.001, 0.003 and 0.10, respectively. For methodology on trend analysis, please see T. Schroeder, “Trend Analysis of NEISS Data,” CPSC, 2000.

<sup>13</sup> The lowest p-value for the age groups was 0.66.

**Table 6: Emergency Department-Treated Injury Estimates Associated with Product Code, “Toys, Not Elsewhere Classified,” for Different Age Groups  
2015–2019**

Calendar Year	Estimated Injuries (% of Total Estimates) Associated with “Toys, Not Elsewhere Classified”			
	All Ages	14 Years of Age or Younger	12 Years of Age or Younger	4 Years of Age or Younger
2015	7,400 (3)	5,600 (3)	5,400 (3)	2,100 (2)
2016	7,700 (3)	6,400 (4)	6,200 (4)	2,300 (3)
2017	9,900 (4)	8,300 (4)	7,900 (5)	4,200 (5)
2018	7,600 (3)	6,400 (4)	6,200 (4)	2,700 (3)
2019	6,100 (3)	4,600 (3)	4,400 (3)	2,100 (3)

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100.

The product code, “Toys, Not Specified,” was reinstated as an available product code in NEISS in 2010, to classify injuries that were associated with a toy that was not identified specifically in the NEISS injury narrative. Table 7 presents the annual estimated emergency department-treated injuries associated with this product code and the percentages of injury estimates for all individuals, 14 years of age or younger, 12 years of age or younger, and 4 years of age or younger from 2015 to 2019. Table 7 shows that the proportions of the estimated injuries related to this product code have remained steady for all four age groups, and staff found no statistically significant trend between 2015 and 2019.<sup>14</sup>

**Table 7: Emergency Department-Treated Injury Estimates Associated with Product Code, “Toys, Not Specified,” for Different Age Groups  
2015–2019**

Calendar Year	Estimated Injuries (% of Total Estimates) Associated with “Toys, Not Specified”			
	All Ages	14 Years of Age or Younger	12 Years of Age or Younger	4 Years of Age or Younger
2015	58,400 (24)	38,600 (21)	38,200 (22)	28,800 (33)
2016	57,900 (24)	36,000 (21)	35,900 (22)	27,000 (32)
2017	59,000 (23)	37,200 (20)	36,700 (21)	26,900 (30)
2018	56,800 (25)	36,200 (22)	35,800 (23)	27,000 (32)
2019	52,300 (23)	32,600 (20)	31,900 (21)	23,600 (30)

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100.

<sup>14</sup> The lowest p-value for the age groups was 0.12.

## Appendix A

### Estimated Number of Toy-Related Injuries from 2011 through 2019

Table 8 and Figure 3 display the annual emergency department-treated injury estimates associated with toys from 2011 through 2019. Staff found a statistically significant decreasing trend in the injury estimates for 4 years of age or younger groups; staff did not find a statistically significant trend for all ages, 14 years of age or younger, and 12 years of age or younger groups.<sup>15</sup> However, staff does not have enough information to determine the causes.

**Table 8: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups 2011–2019**

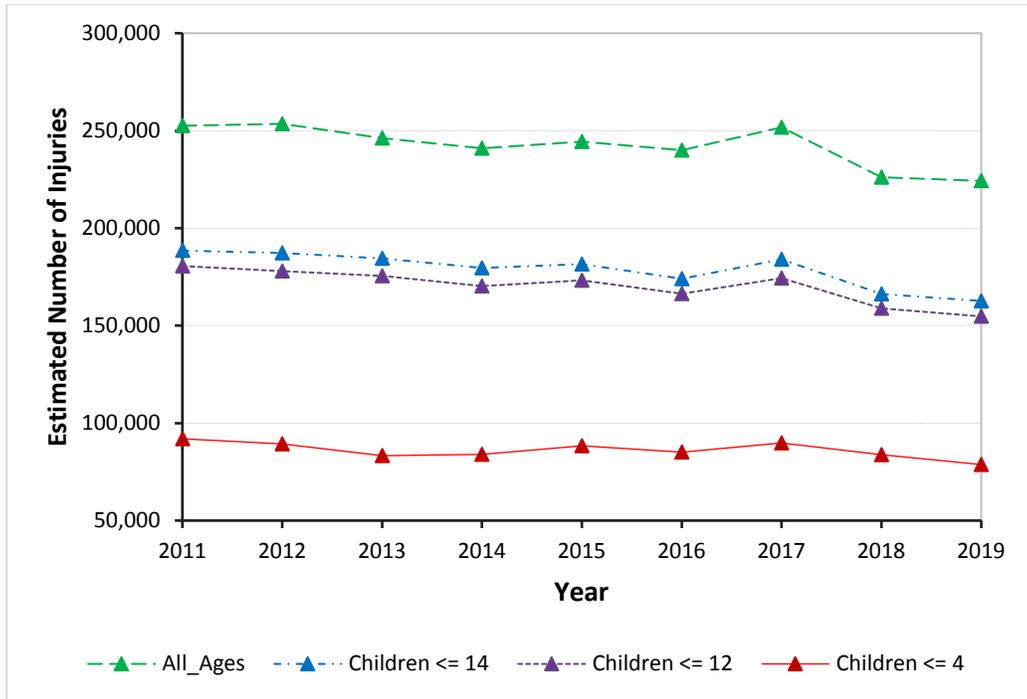
Calendar Year	All Ages			14 Years of Age or Younger			12 Years of Age or Younger			4 Years of Age or Younger		
	Injury Estimate	CV*	Injuries per 100,000 People	Injury Estimate	CV*	Injuries per 100,000 People	Injury Estimate	CV*	Injuries per 100,000 People	Injury Estimate	CV*	Injuries per 100,000 People
2011	252,600	0.0719	81	188,500	0.0809	308	180,600	0.0818	341	92,000	0.0961	457
2012	253,500	0.0711	81	187,300	0.0819	306	178,000	0.0825	337	89,300	0.0930	447
2013	246,300	0.0732	78	184,500	0.0815	302	175,500	0.0825	333	83,300	0.0947	420
2014	240,900	0.0839	76	179,700	0.0959	294	170,300	0.0965	323	84,000	0.1124	423
2015	244,400	0.0861	76	181,600	0.0985	298	173,200	0.1010	328	88,400	0.1171	444
2016	240,000	0.0945	74	174,100	0.1128	286	166,300	0.1152	315	85,200	0.1299	427
2017	251,700	0.0921	77	184,000	0.1098	302	174,300	0.1109	331	89,800	0.1314	452
2018	226,100	0.1069	69	166,200	0.1355	273	158,800	0.1343	302	83,800	0.1407	423
2019	224,200	0.1181	68	162,700	0.1454	269	154,700	0.1458	296	78,700	0.1519	402

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100. Population estimates for 2011 to 2019 are from [Annual Estimates of the Resident Population by Single Year of Age and Sex: April 1, 2010 to July 1, 2019, U.S. Census Bureau, Population Division, Release Date: June 2020.](#)

\*Coefficient of variation (CV) is a measure of the dispersion of the data as a ratio of the standard deviation to the injury estimate. The higher the CV, the larger the dispersion is. The population estimates are assumed to be constant, and therefore the CVs for the estimated injuries per 100,000 people are equivalent to the CVs for the injury estimates.

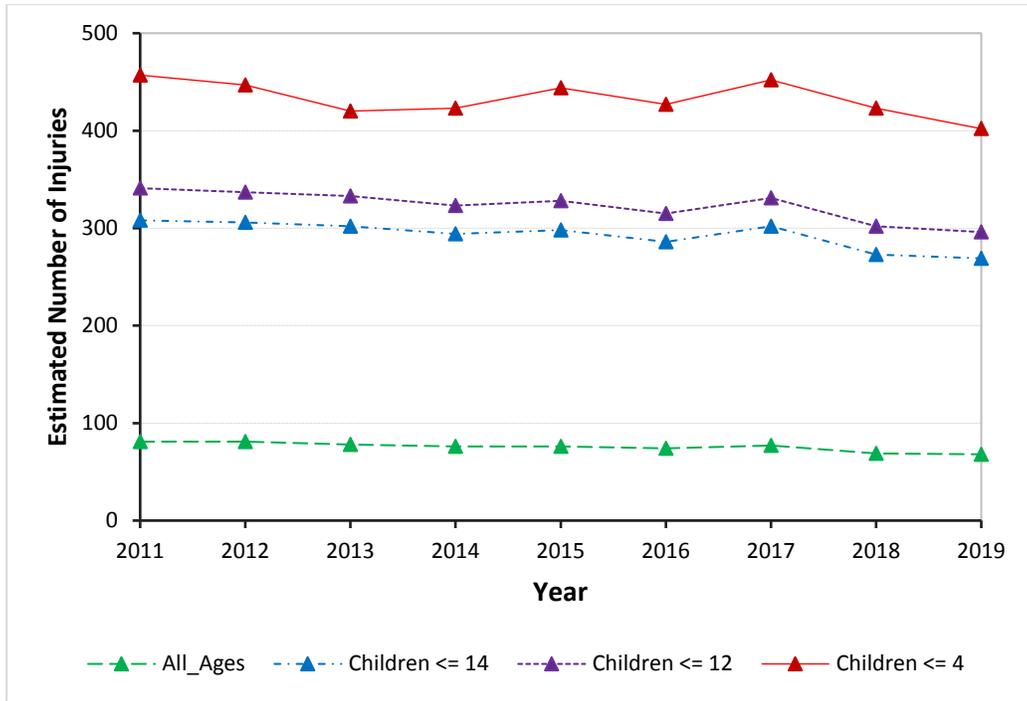
<sup>15</sup> The p-value for 4 years of age or younger group is 0.01. The lowest p-value for the other age groups was 0.19.

**Figure 3: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups 2011–2019**



Source: NEISS, U.S. Consumer Product Safety Commission.

**Figure 4: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups  
Normalized by Number in the Age Category  
2011–2019**



Source: NEISS, U.S. Consumer Product Safety Commission and U.S. Census Bureau.

## Appendix B

### NEISS Product Codes for Toys

Product Code	Toy Type
1301	Tricycles (Children's)
1309	Kites or Kite String
1310	Pogo Sticks
1314	Rocketry Sets
1319	Metal or Plastic Molding Sets
1322	Children's Play Tents, Play Tunnels, or Other Enclosures
1325	Inflatable Toys (Excluding Balls and Balloons)
1326	Blocks, Stacking Toys, or Pull Toys
1327	Non-Wheeled Riding Toys, Unpowered
1328	Wagons (Children's)
1329	Scooters, Unpowered
1330	Powered Riding Toys
1338	Toy Bows or Arrows
1342	Costumes or Masks
1344	Toy Musical Instruments
1345	Building Sets
1346	Clacker Balls
1347	Balloons (Toy)
1349	Stilts
1350	Squeeze or Squeaker Toys
1352	Slingshots or Sling-Propelled Toys
1353	Toy Boxes or Chests
1354	Marbles
1362	Wood-burning Kits
1365	Water Toys (Excluding Squeeze/Squeaker Toys and Inner Tubes or Similar Floating Equipment)
1376	Molding Compounds
1381	Toys, Not Elsewhere Classified
1389	Other Toy Weapons (Non-projectile)
1390	Toy Guns, Not Specified

<b>Product Code</b>	<b>Toy Type</b>
1392	Toy Sports Equipment
1393	Chemistry Sets or Science Kits
1394	Dolls, Plush Toys, and Action Figures
1395	Toys, Not Specified
1398	Wheeled Riding Toys, Unpowered (Excluding Bicycles and Tricycles)
1399	Toy Guns With Projectiles
1550	Infant and Toddler Play Centers (Excluding Jumpers, Bouncers, and Exercisers)
5001	Other Toy Weapons (Projectile)
5005	Riding Toys (Excluding Bicycles and Tricycles), Not Specified
5006	Other Toy Guns
5007	Toy Weapons, Not Specified
5010	Crayons Or Chalk (Excluding Billiard or Pool Chalk)
5013	Toy Make-Up Kits or Cosmetics (Excluding Mirrors)
5015	Toy Caps, Cap Toys, or Cap Guns
5016	Balls, Other or Not Specified
5017	Flying Discs and Boomerangs
5018	Doll Houses and Other Play Scenes
5019	Games or Game Parts (Excluding Marbles and Computer Games)
5020	Pretend Electronics, Tools, Housewares, and Appliances
5021	Toy Vehicles (Excluding Riding Toys)
5023	Scooters, Unpowered