



Toy-Related Deaths and Injuries Calendar Year 2018

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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 and 2018.

Reported Toy-Related Fatalities in Calendar Year 2018

- CPSC staff received reports of 17 toy-related deaths that occurred in the 2018 calendar year among children younger than 15 years old.
- Nonmotorized scooters were associated with three of the 17 reported fatalities in 2018, and all three deaths were due to motor vehicle involvement. Rubber balls and balloons were involved in three fatalities due to airway obstruction in 2018.

Emergency Department-Treated Toy-Related Injuries in Calendar Year 2018¹

- There were an estimated 226,100 toy-related injuries treated in U.S. hospital emergency departments in 2018, and males accounted for 56 percent of the injuries.
- Of the 226,100 estimated toy-related, emergency department-treated injuries, an estimated 73 percent happened to children younger than 15 years of age; 70 percent occurred to children 12 years of age or younger; and 37 percent happened to children younger than 5 years of age.²
- Thirty-nine 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-six 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 younger than 15 years old (18 percent and 19 percent, respectively).

Emergency Department-Treated Toy-Related Injuries from 2014 to 2018

- There is a statistically significant decreasing trend in the estimated number of injuries associated with nonmotorized scooters from 2014 to 2018, for children 12 years of age or younger and children younger than 15 years.

¹ The percentages are calculated from the unrounded injury estimates.

² 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 to the federal toy safety standard enacted by Congress, and to other applicable requirements as well. Additional age breaks are provided in this report to also describe hazards to older and younger children as have been provided in prior reports.

Introduction

This report provides updated summary information on toy-related fatalities for the years 2016 and 2017, and detailed information on toy-related fatalities for 2018. These fatality counts are based on reports obtained by CPSC staff from the CPSC databases—Consumer Product Safety Risk Management System (CPSRMS) and National Electronic Injury Surveillance System (NEISS). In addition, this report presents the estimated emergency department-treated injuries associated with toys for the 2018 calendar year and the injury estimates from 2014 to 2018, based on the NEISS. In Appendix A, historical estimated toy-related emergency department-treated injuries from 2010 to 2018, are presented, along with the coefficient of variations for the injury estimates. Appendix B lists the NEISS product codes used to generate this report.

Toy-Related Deaths³

Fatalities of children younger than 15 years of age that were associated with a toy from 2016 to 2018, as reported to CPSC staff, are summarized in Table 1. 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 below. Toy types that are associated with more than one death between 2016 and 2018, are listed in Table 1, 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. Fatalities are considered in-scope, where a toy was present and, based on statements by investigators, police, family members, or medical examiners, may have played a contributing role in the death.

Due to delays in death certificate reporting, fatality information is not yet complete for 2017 and 2018; at the time of data extraction, death certificate reporting was 100 percent, 89 percent, and 44 percent complete for 2016, 2017, and 2018, respectively.⁴ The data from 2016 and 2017 have been updated to include the three new incident reports received by CPSC staff—two fatalities that happened in 2016, and one fatality that occurred in 2017. Thus, the data differ from the reported fatality tabulations detailed in the previous report for the calendar year 2017.⁵ The three newly reported fatalities involved children 4 months old to 7 years of age, and the toys involved were: a ball, a toy box, and a toy storage hammock.

³ These fatalities do not represent a sample of known probability of selection.

⁴ The reporting percent is measured 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).

⁵ Tu, Y. "Toy-Related Deaths and Injuries, Calendar Year 2017," CPSC, November 2018.

**Table 1: Reported Toy-Related Deaths Among Children Younger Than 15 Years of Age
2016–2018**

| Type of Toy (Hazard) | 2016 ⁶ | | 2017 ⁷ | | 2018 | |
|---|--|---------------------------------|--|---------------------------------|--|---------------------------------|
| | Children 12 Years of Age or Younger [‡] | Children 13 and 14 Years of Age | Children 12 Years of Age or Younger [‡] | Children 13 and 14 Years of Age | Children 12 Years of Age or Younger [‡] | Children 13 and 14 Years of Age |
| TOTAL | 12 | | 14 | | 17 | |
| Sub Total | 11 | 1 | 14 | 0 | 17 | 0 |
| Nonmotorized scooters (motor vehicle involvement) | | | 4 | | 3 | |
| Stuffed toys/doll/doll accessory/toy figure (hanging, airway obstruction, suffocation, mechanical asphyxia) | | 1 | 2 | | 2 | |
| Tricycles (motor vehicle involvement, drowning) | 2 | | 3 | | | |
| Rubber balls (aspiration, airway obstruction) | 1 | | 1 | | 2 | |
| Balls, other (drowning, airway obstruction) | 1 | | 3 | | | |
| Nonmotorized riding toys (motor vehicle involvement, drowning) | 1 | | | | 2 | |
| Water toys (drowning) | 1 | | | | 2 | |
| Balloons/balloon strings (asphyxia/suffocation, airway obstruction) | 1 | | | | 1 | |
| Other toys with a single reported fatality in the year (airway obstruction, mechanical asphyxia, hanging, battery ingestion, drowning, electrocution) | 4 | | 1 | | 5 | |

Source: CPSRMS and NEISS from 1/1/2016 to 12/31/2018; CPSC. Data were extracted in July 2019.

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

⁶ Two new toy-related deaths were reported to CPSC that occurred in the 2016 calendar year, increasing the number of reported deaths to 12 in 2016.

⁷ One new toy-related death was reported to CPSC that occurred in the 2017 calendar year, increasing the number of reported deaths to 14 in 2017.

Table 2 details the fatalities associated with toys for children younger than 15 years of age in 2018 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. There are two unspecified toys in Table 2, which were associated with two deaths that are included in the last row of Table 1 with “other toys.”

As shown in Table 2, three of the 17 reported fatalities of children younger than 15 years of age in 2018, were associated with nonmotorized scooters, and the hazards were motor vehicle involvement. Rubber balls and balloons accounted for three deaths, and the hazards were airway obstruction.

Table 2: Reported Toy-Related Deaths Among Children Younger Than 15 Years of Age 2018

| Type of Toy | Children 12 Years of Age or Younger [¥] | Children 13 and 14 Years of Age |
|--|--|---------------------------------|
| TOTAL | 17 | |
| Sub Total | 17 | 0 |
| Nonmotorized scooters (motor vehicle involvement) | 3 | |
| Nonmotorized riding toys (drowning) | 2 | |
| Rubber balls (airway obstruction) | 2 | |
| Stuffed toy/doll accessory (mechanical asphyxia, airway obstruction) | 2 | |
| Water toys (drowning) | 2 | |
| Unspecified toys (drowning, electrocution) | 2 | |
| Balloon (airway obstruction) | 1 | |
| Plastic toy food (airway obstruction) | 1 | |
| Water gun (drowning) | 1 | |
| Toy dart gun (airway obstruction) | 1 | |

Source: CPSRMS and NEISS from 1/1/2018 to 12/31/2018; CPSC. Data were extracted in July 2019.

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

Of the 17 toy-related fatalities involving children younger than 15 years of age in 2018, six victims were females, and 11 were males. The age range for the 17 reported deaths is 5 months to 11 years. The scenario-specific details of these incidents are presented below.

Nonmotorized Scooters

Three boys—ages 2 to 11 years—were struck and killed by motor vehicles while riding nonmotorized scooters.

- A 2-year-old boy was struck and killed by a motor vehicle while riding a modified stand-up scooter in the parking lot of a motel. The scooter was previously electric powered, but the battery was removed, along with the chain connecting the rear wheel to the motor. The modified scooter

was exclusively human-powered. As the victim exited a carport into the parking lot, a female driver did not see the victim and struck him. The victim and the scooter were pulled under the vehicle. The victim was transported to a local trauma center, where he was pronounced deceased the same day. The driver of the vehicle was under the influence of a controlled substance at the time of the incident, and no further information is available, as the driver is in custody pending felony charges.

- A 7-year-old boy was riding a scooter on a driveway when he was hit by a vehicle driven by a relative. The victim died en route to medical assistance within a few minutes after being hit by the vehicle. The cause of death was crush injuries to the head.
- According to the police report, an 11-year-old boy was riding his kick-style scooter on the street in the dark. The victim entered an intersection without yielding to the oncoming traffic and was struck by a passing sports utility vehicle (SUV). The victim died of multiple blunt-force injuries to the head and torso a short time later.

Nonmotorized Riding Toys

Two boys—ages 22 months and 4 years—died of drowning after gaining unsupervised access to a swimming pool using nonmotorized riding toys.

- A 22-month-old boy drowned in an apartment complex swimming pool. According to the official document, the victim drove his small 4-wheeler into the pool. The victim was transported to a hospital and was pronounced dead there. It was reported that the pool was not properly fenced, and there was a breach that allowed the victim to drive his toy in.
- A 4-year-old boy drowned in a neighbor's swimming pool. According to the police report, the victim used a wheeled riding toy car and climbed on top of it so that he could get over the backyard fence and into the neighbor's yard. There is an in-ground swimming pool in the neighbor's yard. The victim's grandfather could not locate the victim, and then he saw the toy riding car in the area where the victim had been attempting to climb over the fence the day before. The grandfather looked over the fence and observed the victim face down in the neighbor's swimming pool. The victim was transported to a hospital and was pronounced deceased a short time later.

Rubber Balls

Two girls—ages 3 and 6 years—died of airway obstruction in separate incidents, each when a rubber ball lodged in their airways.

- A 3-year-old girl swallowed a semi-clear rubber bouncy ball that measured 1 and 11/16 inches in diameter. The ball was extremely slippery when it got wet and slid down the victim's throat just past the tonsils, which blocked all air intake. Emergency responders were able to dislodge the ball from the victim's throat but reported that it was difficult to remove the ball because it was so slippery. The victim suffered brain damage due to oxygen deprivation. The victim was pronounced deceased 6 days later.
- A 6-year-old girl was found choking on an object at home by her mother. Emergency medical personnel were called and began resuscitation efforts. The victim was transported to a local hospital. The emergency room physician dislodged a soft green rubber ball from the victim's upper airway. The rubber ball was approximately 2.3 cm in diameter. All efforts to revive the victim were unsuccessful, and the victim died later that day. The mother reported that the victim had a history of Cornelia De Lange syndrome and had an attraction to rubber objects like balls and rubber bands. The victim had similar choking incidents in the past, some resulting in trips to the emergency room.

Stuffed Toy/Doll Accessory

A 5-month-old baby boy suffocated on a large plush bear, and a 2-year-old girl choked on a toy pacifier.

- A 5-month-old baby boy was placed on his back to sleep toward the foot of an adult bed. He was lying on a bath towel. There were a bed comforter and several large stuffed animals on the bed also. There was a gap of 10 inches between the bed and the wall. One large plush bear had fallen into this opening. It appeared that the victim had rolled off the bed into the gap between the bed and the wall. The victim was found face down on top of the plush bear. The head of the victim was at the lowest point of the bear that was 11 inches below the side of the bed. The victim was transported to a local hospital where he was pronounced dead as a result of mechanical asphyxia.
- A 2-year-old girl died after choking on a foreign object while eating. The foreign object was a small plastic toy pacifier that came from a toy doll set. The child aspirated the pacifier, which was found in the victim's bronchus during the autopsy. The pacifier measured approximately 1.2 cm in length and 1 cm in width.

Water Toys

Two 4-year-old children—a boy and a girl—drowned in separate swimming pool incidents, each while playing with a water toy.

- A 4-year-old boy was at a family gathering in their apartment complex in-ground swimming pool. There were various people in and around the pool. According to the police report, the victim at some point got out of the water and had his life vest removed to go to the bathroom. Upon his return, the victim sat at the side of the pool deck near the stairs. The victim began to reach for a pink inflatable inner tube and slid off the deck into the water. Nobody noticed when the victim disappeared from the water surface. The victim was pulled out of the water unresponsive 12 minutes later. Cardiopulmonary resuscitation (CPR) was performed on the victim, and then he was transported to a hospital, where he died a few days later due to drowning.
- A 4-year-old girl drowned in an in-ground swimming pool at the apartment complex where her family lived. According to the medical examiner's report, the victim was seen playing with a noodle in the 3-foot deep area of the pool. It was unknown how long the victim was underwater before someone noticed her at the bottom of the pool. The victim was taken to a hospital and died due to drowning.

Unspecified Toys

A 2-year-old boy drowned while trying to reach for a toy in a swimming pool, and an 8-year-old boy was electrocuted while getting a toy behind an oven.

- A 2-year-old boy was found unresponsive in a residential swimming pool in the backyard. It was reported that the victim unlocked the door and walked back to the pool while his family members were distracted. The family found a toy in the pool and thought the victim may have been reaching for the toy when he fell in the pool.
- An 8-year-old boy was electrocuted and died when he tried to get a toy from behind an electric oven.

Balloon

A 13-month-old baby girl swallowed a balloon while being cared by her 14-year-old cousin. First responders arrived and provided life saving measures, and the victim was transported to a local emergency department. The victim was then transferred to an advanced care hospital, where she died of her injuries 4 days later.

Plastic Toy Food

A 10-month-old baby boy choked on a plastic toy egg. The EMS personnel removed the toy egg from the victim's airway, and the victim was taken to a local hospital and later transferred to a children's hospital for treatment. The victim died in the children's hospital 5 days later.

Water Gun

A 2-year-old girl and her younger sibling were playing with water guns near an in-ground hot tub in the backyard under the supervision of their mother. According to the police report, both children refilled their water guns in the hot tub. The mother went inside of the house to take care of a baby. A few minutes later, the mother looked outside through a kitchen window and saw the victim floating face down in the spa. The mother removed the victim from the spa and began CPR. Emergency personnel transported the victim to a local hospital and later transferred her to a higher-level care hospital. The victim was pronounced deceased 6 days after the submersion incident.

Toy Dart Gun

A 2-year-old boy was found choking and became unresponsive and stopped breathing. The victim was unattended for approximately 1 to 2 minutes after playing with a plastic clip load toy dart gun with his 5-year-old brother. The victim was transported to a local medical center, and a soft plastic toy dart was found lodged in his airway. The victim was pronounced dead by the emergency room doctor later that day. The cause of death was asphyxia due to airway obstruction. The dart involved was 2.25" in length and had a suction cup at one end. The circular suction cup on the dart measured 11/16" in diameter. The opposite end of the dart was also circular and measured 5/16" in diameter.

Estimated Toy-Related Injuries⁸

In 2018, there were an estimated 226,100 toy-related injuries for all ages treated in U.S. hospital emergency departments. Of them, 126,600 estimated injuries (56 percent) occurred to males. Most of the victims (96 percent) were treated and released from the hospital. Three percent of the victims were admitted to the hospital or transferred to another hospital. The remaining 1 percent were held for observation, left without being seen by a doctor, or were dead on arrival.

Table 3 presents the estimated toy-related, emergency department-treated injuries in 2018, for different age groups. Of the 226,100 estimated injuries associated with toys in 2018, 73 percent were sustained by children younger than 15 years of age; 70 percent were sustained by children 12 years or younger; and 37 percent were sustained by children younger than 5 years of age.

**Table 3: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups
2018**

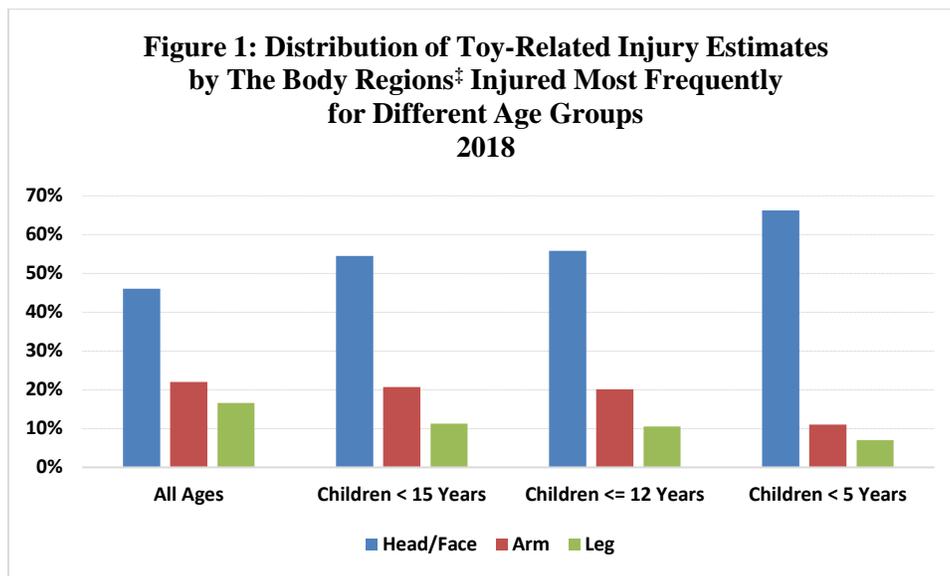
| Age Groups | All Ages | Younger Than 15 Years of Age | 12 Years of Age or Younger [‡] | Younger Than 5 Years of Age |
|-----------------------------|----------|------------------------------|---|-----------------------------|
| Injury Estimates | 226,100 | 166,200 | 158,800 | 83,800 |
| Injuries per 100,000 People | 69 | 273 | 302 | 423 |

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100. Population estimate for 2018 is from [NC-EST2018-AGESEX-RES: Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2010 to July 1, 2018, U.S. Census Bureau, Population Division. Release Date: April 2019.](#)

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

⁸ 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're coded, and an alphabetical listing of products with current product codes, please see the NEISS Coding Manual at: https://www.cpsc.gov/s3fs-public/2019_NEISS_Coding_Manual.pdf?kF045AF8hSkt_vPuRHjyIbiet.BzcT_v

Figure 1 presents the distribution of the 2018 annual estimated toy-related, emergency department-treated injuries by the specific parts of the body most frequently injured for different age groups.^{9,10} 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 2018 for all four age groups specified, followed by arms and legs.



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

‡ 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.

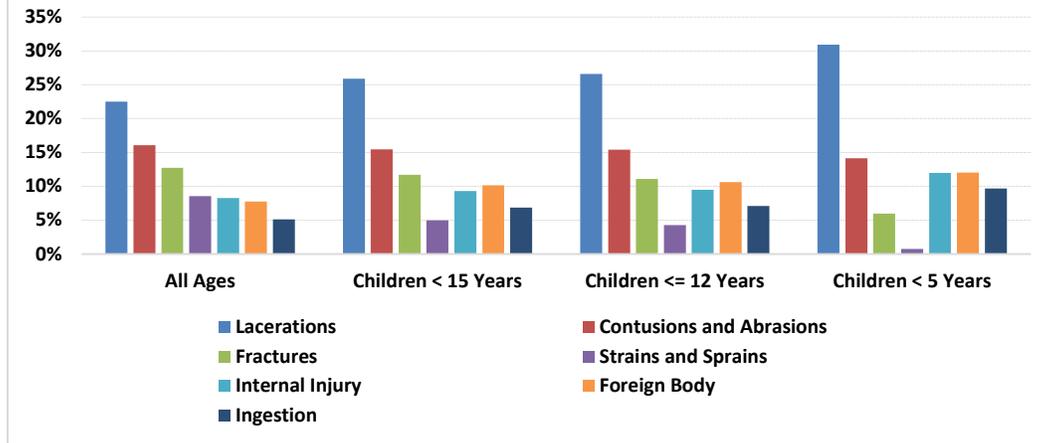
Figure 2 shows the distribution of the annual estimated toy-related emergency department-treated injuries by the type of injuries diagnosed most frequently for different age groups.¹¹ For all four age groups, lacerations was the diagnosis associated the largest number of estimated toy-related injuries in 2018, followed by contusions/abrasions. Fractures ranked the third, with the largest number of toy-related injuries for all age groups except for children younger than 5 year. For that age group, internal injury, foreign body, and ingestion each accounted for more estimated toy-related injuries than fractures.

⁹ In October 2018, an upgrade was implemented for NEISS. 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. However, in 2018, less than 2 percent of the toy-related injury cases in NEISS had two codes of body part injured or diagnosis.

¹⁰ If either of the two codes listed a specific body part (as opposed to an unspecified body part), that body part is classified as being injured in the incident for the data analysis purpose.

¹¹ If either of the two codes lists a specific diagnosis (type of injury), that diagnosis is classified as being the type of injury for the data analysis purpose.

Figure 2: Distribution of Toy-Related Injury Estimates by The Type of Injuries Diagnosed Most Frequently for Different Age Groups 2018



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

Table 4 presents the toy categories that were associated the largest number of injuries in 2018 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 children younger than 5 years of age. For children younger than 5 years, building sets and toy vehicles 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 2018

| Toy Category | Estimated Injuries (% of Total Estimates [‡]) | | | |
|-----------------------|---|------------------------------|----------------------------|-----------------------------|
| | All Ages | Younger Than 15 Years of Age | 12 Years of Age or Younger | Younger Than 5 Years of Age |
| Toys, Not Specified | 56,800 (25) | 36,200 (22) | 35,800 (23) | 27,000 (32) |
| Nonmotorized Scooters | 39,500 (17) | 31,700 (19) | 28,800 (18) | 4,900 (6) |
| Toy Balls | 21,600 (10) | 16,100 (10) | 14,600 (9) | 4,200 (5) |
| Toy Vehicles | 10,900 (5) | 7,700 (5) | 7,700 (5) | 5,000 (6) |
| Building Sets | 10,000 (4) | 9,300 (6) | 9,300 (6) | 5,500 (7) |

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

[‡] Percentages are calculated from the unrounded injury estimates and then rounded to the nearest integer.

While nonmotorized scooters continued to be the category of toys associated with the most injuries for children younger than 15 years age and children 12 years of age or younger in 2018, the

percentages of the associated toy-related injury estimates have decreased steadily over the last 5 years for these two age groups. Table 5 displays the annual estimated emergency department-treated injuries associated with nonmotorized scooters from 2014 to 2018, for these two age groups of children. This table also presents the injury estimates associated with all toys and the percentages of injury estimates related to nonmotorized scooters. There is a statistically significant decreasing trend in the estimated injuries related to nonmotorized scooters between 2014 and 2018 for these two age groups of children.

Table 5: Nonmotorized Scooter-Related Emergency Department-Treated Injury Estimates for Children of Different Age Groups 2014–2018

| Calendar Year | Estimated Injuries | | | |
|---------------|-----------------------------------|--|-----------------------------------|--|
| | Younger Than 15 Years of Age | | 12 Years of Age or Younger | |
| | Injuries Associated with All Toys | Injuries (%) Associated with Nonmotorized Scooters | Injuries Associated with All Toys | Injuries (%) Associated with Nonmotorized Scooters |
| 2014 | 179,700 | 47,400 (26) | 170,300 | 42,900 (25) |
| 2015 | 181,600 | 45,500 (25) | 173,200 | 41,900 (24) |
| 2016 | 174,100 | 39,800 (23) | 166,300 | 36,600 (22) |
| 2017 | 184,000 | 40,300 (22) | 174,300 | 36,800 (21) |
| 2018 | 166,200 | 31,700 (19) | 158,800 | 28,800 (18) |

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 for all ages, children younger than 15 years of age, children 12 years of age or younger, and children younger than 5 years of age from 2014 to 2018. It shows that the proportions of the estimated injuries related to this product code were similar across different age groups between 2014 and 2018. In addition, there is no statistically significant trend in the estimated injuries associated with this product code from 2014 to 2018, in any of the four age groups presented in Table 6.

**Table 6: Emergency Department-Treated Injury Estimates Associated with Product Code, “Toys, Not Elsewhere Classified,” for Different Age Groups
2014–2018**

| Calendar Year | Estimated Injuries (% of Total Estimates) Associated with “Toys, Not Elsewhere Classified” | | | |
|---------------|---|------------------------------|----------------------------|-----------------------------|
| | All Ages | Younger Than 15 Years of Age | 12 Years of Age or Younger | Younger Than 5 Years of Age |
| 2014 | 7,600 (3) | 6,200 (3) | 5,800 (3) | 2,800 (3) |
| 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) |

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 for all individuals, children younger than 15 years, children 12 years of age or younger, and children younger than 5 years from 2014 to 2018. Table 7 shows that the proportions of the estimated injuries related to this product code have remained steady for all four age groups, and there is no statistically significant trend between 2014 and 2018.

**Table 7: Emergency Department-Treated Injury Estimates Associated with Product Code, “Toys, Not Specified,” for Different Age Groups
2014–2018**

| Calendar Year | Estimated Injuries (% of Total Estimates) Associated with “Toys, Not Specified” | | | |
|---------------|--|------------------------------|----------------------------|-----------------------------|
| | All Ages | Younger Than 15 Years of Age | 12 Years of Age or Younger | Younger Than 5 Years of Age |
| 2014 | 56,400 (23) | 35,700 (20) | 35,300 (21) | 25,600 (30) |
| 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 | 56,900 (25) | 36,200 (22) | 35,800 (23) | 27,000 (32) |

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

Appendix A

Estimated Number of Toy-Related Injuries from 2010 through 2018

Table 8 and Figure 3 display the annual emergency department-treated injury estimates associated with toys from 2010 through 2018. There is not a statistically significant trend¹² observed in the data for all ages, children younger than 15 years of age, children 12 years or younger, and children younger than 5 years of age from 2010 to 2018.

¹² For methodology on trend analysis, please see T. Schroeder, "Trend Analysis of NEISS Data," CPSC, 2000.

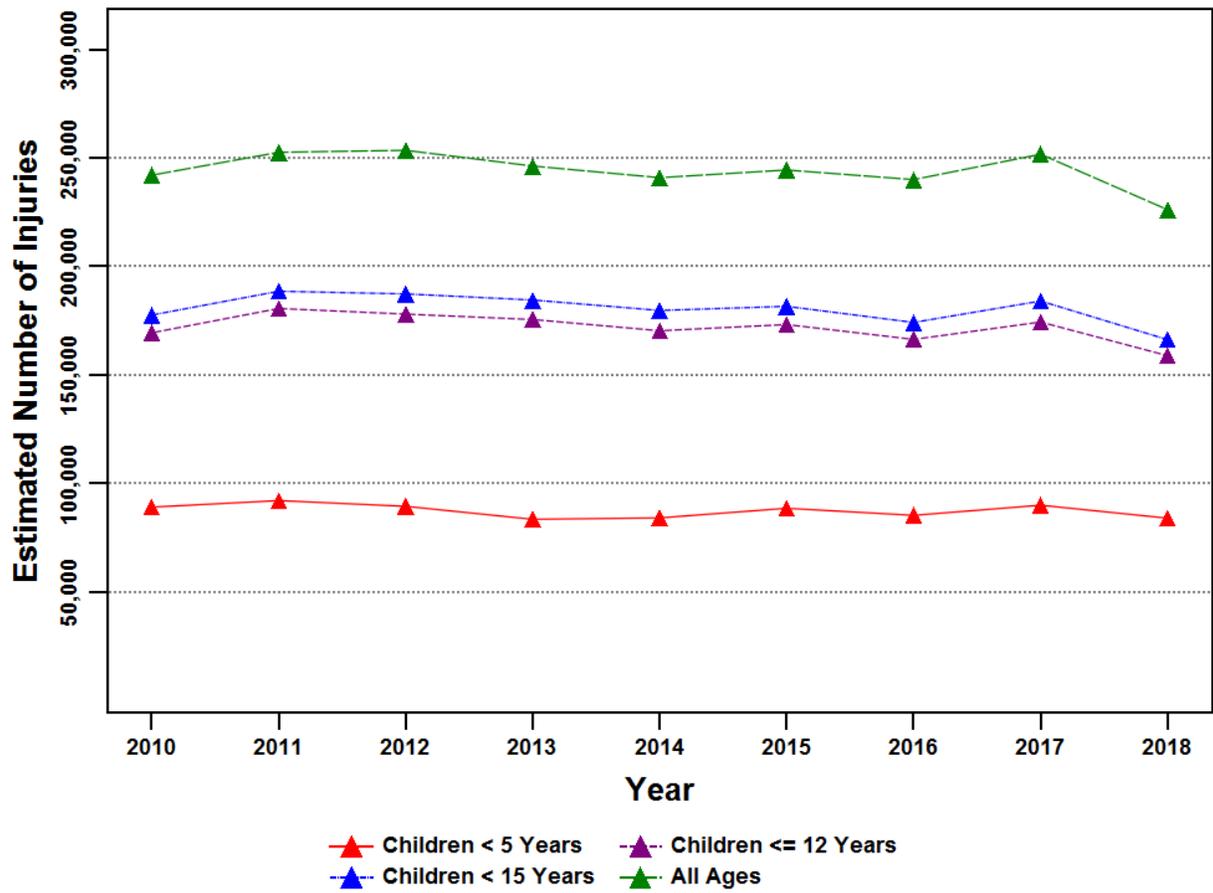
**Table 8: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups
2010–2018**

| Calendar Year | All Ages | | | Children Younger Than 15 Years of Age | | | Children 12 Years of Age or Younger | | | Children Younger Than 5 Years of Age | | |
|---------------|-----------------|--------|-----------------------------|---------------------------------------|--------|-----------------------------|-------------------------------------|--------|-----------------------------|--------------------------------------|--------|-----------------------------|
| | 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 |
| 2010 | 242,000 | 0.0731 | 78 | 177,500 | 0.0819 | 290 | 169,300 | 0.0819 | 320 | 88,900 | 0.0872 | 441 |
| 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 |

Source: NEISS, U.S. Consumer Product Safety Commission. Estimates are rounded to the nearest 100. Population estimates for 2010 to 2018 are from [NC-EST2018-AGESEX-RES: Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2010 to July 1, 2018, U.S. Census Bureau, Population Division. Release Date: April 2019.](#)

*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.

Figure 3: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups 2010–2018



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

Appendix B

NEISS Product Codes for Toys as of January 1, 2018

| 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 |

| Product Code | Toy Type |
|---------------------|---|
| 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) |