



# **Toy-Related Deaths and Injuries Calendar Year 2012**

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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.

### Reported Fatalities in Calendar Year 2012

- CPSC staff received 11 reports of toy-related deaths that occurred in the 2012 calendar year among children younger than 15 years old. Moreover, all 11 victims were younger than 12 years of age.
- Balloons were associated with two (18 percent) of the 11 reported deaths in 2012.
- In 2012, most toy-related deaths were due to drowning (5 deaths) and asphyxiation/aspiration (3 deaths).

### Emergency Department-Treated Injuries in Calendar Year 2012

- In 2012, there were an estimated 265,000 toy-related injuries treated in U.S. hospital emergency departments.
- There is not a statistically significant trend in the estimated toy-related injuries from 2008 to 2012, for all individuals, children younger than 15 years, children 12 years of age or younger, or children younger than five years.
- A plurality (43 percent) of the estimated emergency department-treated injuries is classified as lacerations, contusions, or abrasions. Forty-five percent of the estimated injuries were to the head and face area, the most commonly affected area of the body.
- Males accounted for 154,500 (58 percent) of the estimated toy-related injuries in 2012.
- Ninety-six percent of the emergency department-treated, toy-related injury victims were treated and released.
- Of the 265,000 estimated toy-related, emergency department-treated injuries, an estimated 192,000 (72 percent) happened to children younger than 15 years of age; an estimated 181,600 (69 percent) occurred to children 12 years of age or younger; while an estimated 89,500 (34 percent) happened to children younger than five years of age.
- For children 12 years or younger or children younger than 15 years old, nonmotorized scooters continued to be the category of toys associated with the most injuries (26 percent and 27 percent, respectively) in 2012. There is no statistically significant trend in the estimated injuries associated with nonmotorized scooters in the last five years for children in these two age groups.

## Introduction

This report provides updated summary information on toy-related fatalities for the years 2010 and 2011, and it gives detailed information on toy-related fatalities for 2012. These fatality counts are based on reports obtained by CPSC staff from the CPSC Injury and Potential Injury Incident file (IPII), Death Certificate File (DTHS), In-Depth Investigations (INDP), and the National Electronic Injury Surveillance System (NEISS). In addition, this report presents the estimated emergency department-treated injuries associated with toys for the 2012 calendar year and the injury estimates from 2008 to 2012, based on the NEISS. In Appendix A, historical estimated toy-related emergency department-treated injuries from 1998 to 2012 are given, along with their 95 percent confidence intervals. Appendix B lists the NEISS product codes used to generate this report.

## Toy-Related Deaths<sup>1</sup>

Fatalities for children younger than 15 years of age, as reported to CPSC staff from 2010 to 2012, are summarized in Table 1. The reported death totals for each year 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. The data from 2011 have been updated with four new incident reports received by CPSC staff; thus, they differ from the reported fatality tabulations detailed in the previous memo for the calendar year 2011.<sup>2</sup> No new toy-related fatality reports were received for 2010. All of the four fatalities that occurred in 2011 but reported in 2012 involved children 12 years of age or younger. Two of these fatalities involved balloons. The other two were associated with a crayon, an unspecified toy and playdough. Toys that are associated with more than one fatality between 2010 and 2012 are listed in the table to highlight the toys (and associated hazards). For other types of toys associated with only one fatality across the given years, the information is summarized in the final row of the table. Fatalities are included 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.

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<sup>1</sup> These fatalities do not represent a sample of known probability of selection. They may not include all of the toy-related deaths that occurred during the time period, in part, because at the time of data extraction, death certificate reporting was 92 percent, 76 percent, and 38 percent complete for 2010, 2011, and 2012, respectively.

<sup>2</sup> Y. Tu, "Toy-Related Deaths and Injuries, Calendar Year 2011," CPSC, November 2012.

**Table 1: Reported Toy-Related Deaths Among Children Younger Than 15 Years of Age  
2010–2012<sup>3</sup>**

Type of Toy (Hazard)	2010		2011 <sup>4</sup>		2012	
	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
<b>TOTAL</b>	<b>19</b>		<b>17</b>		<b>11</b>	
<b>Sub Total</b>	<b>19</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>11</b>	<b>0</b>
Balloons (airway obstruction, aspiration, asphyxiation)	5		5		2	
Tricycles (drowning, fall)			2		5	
Nonmotorized scooters (motor vehicle involvement)	1		1	1	2	
Stuffed toys/doll/doll accessory (choking, strangulation, suffocation)	2				1	
Balls, other (drowning)	2		1			
Toy boxes (entrapment, drowning, hanging)	2		1			
Rubber balls/other small ball (airway obstruction, choking)	3					
Inflatable toys other than balloons (drowning, fall)	1		1			
Other toys with a single reported fatality in the year (asphyxiation, drowning, choking)	3		5		1	

Source: In-Depth Investigations (INDP), Injury and Potential Injury Incidents (IPII), Death Certificates (DTHS), and the National Electronic Injury Surveillance System (NEISS) from 1/1/2010 to 12/31/2012; CPSC. Data was extracted in July 2013.

<sup>3</sup> Toy-related deaths among children 12 years of age or younger are presented 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).

<sup>4</sup> Four new toy-related deaths were reported to CPSC staff occurring in the 2011 calendar year, increasing the number of reported deaths to 17 in 2011. No additional toy-related fatalities from 2010 were reported to CPSC staff in 2012.

Table 2 details the fatalities associated with toys for children younger than 15 years of age in 2012 that were reported to CPSC staff. The toy types and associated hazards involved in these reported fatalities are presented in descending order of the frequency of reports. There is one toy (toy bowling pins) in Table 2, which was associated with one death that is included in the last row of Table 1 with “other toys.” There is another toy (stuffed animal) that was associated with a single death in 2012; however, because it was associated with other deaths in 2010, it is presented in the row for stuffed toys on Table 1 to highlight the hazard.

As shown in Table 2, seven fatalities (64 percent) of children younger than 15 years of age in 2012 were associated with riding toys (*i.e.*, tricycles and nonmotorized scooters), which involved drowning, injuries from a fall, or motor vehicles. Three of the 11 (27 percent) reported toy-related deaths in 2012 involved asphyxiation, suffocation, or aspiration, and they were associated with balloons and a stuffed animal.

**Table 2: Reported Toy-Related Deaths Among Children Younger Than 15 Years of Age  
2012**

Type of Toys	Children 12 Years of Age or Younger <sup>†</sup>	Children 13 and 14 Years of Age
<b>TOTAL</b>	<b>11</b>	
<b>Sub Total</b>	<b>11</b>	<b>0</b>
Tricycles (drowning, fall)	5	
Nonmotorized scooters (motor vehicle involvement)	2	
Balloons (asphyxiation, aspiration)	2	
Stuffed animal (suffocation)	1	
Toy bowling pins (drowning)	1	

Source: INDP, IPII, DTHS, and NEISS from 1/1/2012 to 12/31/2012; CPSC. Data was extracted in July 2013.

<sup>†</sup> Toy-related deaths among children 12 years of age or younger are presented 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).

In 2012, there were 11 reported deaths related to toys. Of the 11 fatalities, five victims were females, and six were males. The age range for the 11 reported deaths is six months to seven years. The scenario-specific details of some of these incidents are described below.

### **Tricycles**

Five victims—one female and four males, ages of 12 months to three years—died when falls from tricycles resulted in drowning or fatal injuries in 2012.

A three-year-old girl was found floating face down in a residential in-ground pool, and her tricycle was also in the pool. The medical examiner’s report stated that the victim likely tipped over into the pool when the tricycle’s wheels went off the rim. A two-year-old boy was found floating face down in a backyard pool and his tricycle was inside the pool upside down lying on the step of the pool per the police report. The victim was transported to a local hospital where he was pronounced dead. The police believed that the victim fell into the pool while riding his tricycle. Another two-year-old boy was pulled from a residential in-ground pool by his mother. The mother was looking for the victim and noticed his tricycle

was in the pool upside down, and she looked into the pool and found the victim in the pool. The victim was pronounced dead four days later in a hospital. The fourth victim was also a two-year-old boy. According to the medical examiner's report, he fell into an in-ground pool while riding a toy tricycle and died from the complications of drowning two months later at home under hospice care.

A 12-month-old boy was riding a tricycle in "circles" on the concrete pavement of his driveway under the supervision of his mother. For unknown reasons the tricycle and the victim "toppled over" causing the victim and the tricycle to fall forward. The victim's head struck the pavement and was observed by his mother to have an open wound. The victim was unconscious and transported by an ambulance to a hospital where he was pronounced dead.

### **Nonmotorized Scooters**

There were two deaths associated with nonmotorized scooters. A six-year-old boy was struck by a truck while crossing a highway between school and his home on a scooter, and he died at the scene according to the state police. A seven-year-old boy rode down a hill on his scooter and passed into an intersection of roads where he struck the front right side of a passing passenger car according to the medical examiner's report. The victim died of a traumatic brain injury.

### **Balloons**

There were two fatalities involving balloons in 2012. A six-month-old girl ingested a small rubber balloon and died of asphyxia due to airway obstruction. A seven-month-old girl died in a hospital 17 days after inhaling an un-inflated latex balloon at her home.

### **Stuffed Animal**

A seven-month-old girl was found unresponsive in her crib with the right side of her face against a stuffed animal. She died of asphyxia by suffocation per the medical examiner.

### **Toy Bowling Pins**

A 15-month-old girl drowned in a plastic 5-gallon bucket containing "mop water" that was 3.5 inches deep. It was surmised that the victim found the bucket with two toy bowling pins in it and was reaching down into the bucket when she lost her balance and fell head first into the water, according to the police report.

## Estimated Toy-Related Injuries<sup>5</sup>

In 2012, there were an estimated 265,000 toy-related injuries for all ages treated in U.S. hospital emergency departments. These injuries were related to, but not necessarily caused by, toys. There is not a statistically significant trend in the estimated annual toy-related emergency department-treated injuries from 2008 to 2012, for all ages.<sup>6</sup> Moreover, for children younger than 15 years of age, children 12 years of age or younger, and children younger than five years of age, there is not a statistically significant trend during the same time period. Table 3 displays the annual injury estimates across these four age groups from 2008 to 2012. For additional historical estimates, refer to the attached Appendix A.

**Table 3: Annual Toy-Related Emergency Department-Treated Injury Estimates  
2008–2012**

<b>Calendar Year</b>	<b>All Ages</b>	<b>Younger Than 15 Years of Age</b>	<b>12 Years of Age or Younger<sup>‡</sup></b>	<b>Younger Than 5 Years of Age</b>
2008	235,300	172,700	164,400	82,300
2009	250,100	185,900	177,800	90,600
2010	251,700	181,500	172,000	89,200
2011	262,300	193,200	184,100	92,200
2012	265,000	192,000	181,600	89,500

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

<sup>‡</sup> Toy-related injury estimates among children 12 years of age or younger are presented 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 265,000 estimated emergency department-treated injuries associated with toys in 2012, 72 percent (192,000) were sustained by children younger than 15 years of age, 69 percent (181,600) were sustained by children 12 years or younger, and 34 percent (89,500) were sustained by children younger than five years of age. Males accounted for 58 percent (154,500) of the estimated treated injuries. Most of the victims (96 percent) were treated and released from the hospital. Two percent of the victims were admitted to the hospital or transferred to another hospital. The remaining two percent were held for observation or left without being seen by a doctor.

Figure 1 presents the distribution of annual estimated toy-related emergency department-treated injuries by the specific parts of the body injured. Forty-five percent of the estimated 265,000 injuries in 2012 (119,200), occurred to the head and face area (head, face, eye, mouth, and ear). The arm, from the shoulder to finger, accounted for 23 percent of the injuries (61,100). The leg (upper leg, lower leg, knee, ankle, foot, and toes) accounted for 18 percent (47,100). The remaining 14 percent of injuries were to other parts of the body not reported above. The individual body parts with the most estimated injuries overall were the face (50,300) and the head (38,200).

<sup>5</sup> The source of these data is the U.S. Consumer Product Commission's National Electronic Injury Surveillance System (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: <http://www.cpsc.gov/neiss/completemanual.pdf>.

<sup>6</sup> Throughout this report, a change (increase/trend) in estimated injuries over the given years is determined to be statistically significant where the p-value for the statistic that tests for trend is less than 0.05.



**Figure 1: Distribution of Toy-Related Injury Estimates by Body Regions Injured for All Ages**  
**2012**  
 (Total=265,000)

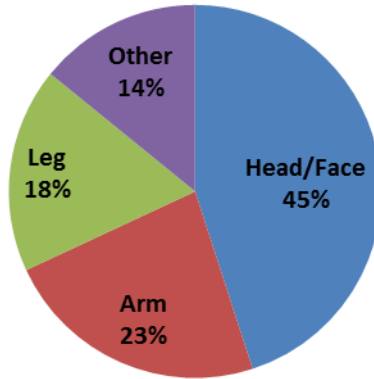
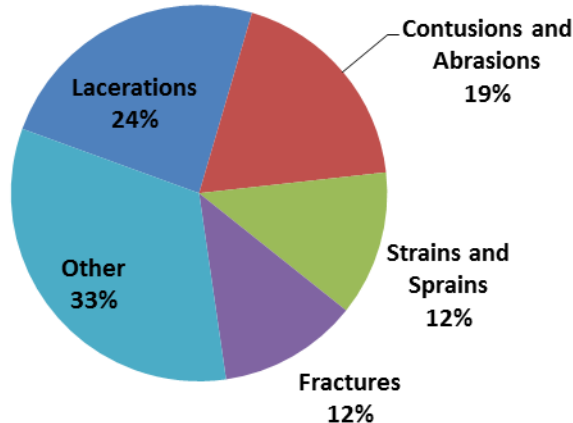


Figure 2 shows the distribution of annual estimated toy-related emergency department-treated injuries by type of injury. In 2012, 24 percent of estimated emergency department-treated injuries were diagnosed as lacerations, while an estimated 19 percent were diagnosed as contusions/abrasions. Strains/sprains represented an estimated 12 percent of injuries, and fractures represented 12 percent as well. The remaining 33 percent of estimated injuries were spread across several other diagnoses, such as: internal injury, ingestion, dislocation, concussion, and puncture injuries, among others.

**Figure 2: Distribution of Toy-Related Injury Estimates by Type of Injuries for All Ages**  
**2012**  
 (Total=265,000)



In 2012, riding toys continued to be associated with more emergency department-treated injuries for all ages than any other category of toy.<sup>7</sup> They were associated with 82,800 (31 percent) estimated injuries. Nonmotorized scooters accounted for 73 percent of the estimated injuries related to riding toys for all ages. As shown in Table 4, the top three specifically identified toys that were associated with the most estimated injuries for all ages in 2012 were: nonmotorized scooters (60,100, or 23 percent); toy balls (23,800, or 9 percent); and toy vehicles (13,600, or 5 percent).

**Table 4: Toy Categories Associated with the Largest Number of Estimated Emergency Department-Treated Injuries for Different Age Groups  
2012**

Toy Category	Estimated Injuries (%)			
	All Ages	Younger Than 15 Years of Age	12 Years of Age or Younger <sup>¥</sup>	Younger Than 5 Years of Age
Nonmotorized Scooters	60,100 (23)	52,400 (27)	47,500 (26)	8,300 (9)
Toys, Not Specified	57,400 (22)	33,900 (18)	33,500 (18)	24,800 (28)
Toy Balls	23,800 (9)	16,800 (9)	15,600 (9)	5,800 (6)
Toy Vehicles	13,600 (5)	9,200 (5)	9,000 (5)	6,900 (8)

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

<sup>¥</sup> Toy-related injury estimates among children 12 years of age or younger are presented 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).

Patterns for children younger than 15 years of age and for children 12 years of age or younger in 2012 were similar to those for all individuals.

For children younger than 15 years of age, riding toys, with 73,500 (38 percent) injuries, were also associated with more estimated injuries than any other category of toy. Nonmotorized scooters accounted for 71 percent of the estimated injuries related to riding toys. Table 4 shows that the top three specifically identified toys associated with the most injuries for children younger than 15 years of age were the same as for all ages: nonmotorized scooters (52,400, or 27 percent); toy balls (16,800, or 9 percent); and toy vehicles (9,200, or 5 percent).

For children 12 years of age or younger, riding toys, with 68,400 (38 percent) estimated injuries, were associated with a larger number of estimated injuries than any other category of toy as well. Nonmotorized scooters accounted for 69 percent of the estimated injuries related to riding toys. Table 4 displays that the top three specifically identified toys associated with the most injuries for children 12 years of age or younger were the same as for all ages: nonmotorized scooters (47,500, or 26 percent); toy balls (15,600, or 9 percent); and toy vehicles (9,000, or 5 percent).

For children younger than five years of age, riding toys, with 23,200 (26 percent) estimated injuries, were too associated with more injuries than any other specified category of toy in 2012. However, nonmotorized scooters accounted for only 36 percent of the riding toy-related injuries. As displayed in Table 4, the top three specifically identified toys associated with the most injuries for children younger

<sup>7</sup> Riding toys include these toy products: nonmotorized scooters; tricycles; unpowered nonwheeled riding toys; children's wagons; powered riding toys; unpowered wheeled riding toys; and unspecified riding toys (excluding bicycles and tricycles).

than five years of age in 2012 were: nonmotorized scooters (8,300, or 9 percent); toy vehicles (6,900, or 8 percent); and toy balls (5,800, or 6 percent). This varies slightly from what were observed for all ages, children younger than 15 years of age, or children 12 years of age or younger.

Table 5 displays the annual estimated emergency department-treated injuries associated with nonmotorized scooters from 2008 to 2012, for children younger than 15 years of age, children 12 years of age or younger, and for children younger than five years of age. This table also presents the injury estimates associated with all toys and the percentages of injury estimates related to nonmotorized scooters. In 2012, nonmotorized scooters were associated with the most estimated injuries among specifically identified toys for these three age groups of children. There is not a statistically significant trend in the estimated injuries related to nonmotorized scooters between 2008 and 2012 for any of the three age groups of children.

**Table 5: Nonmotorized Scooter-Related Annual Emergency Department-Treated Injury Estimates for Children of Different Age Groups 2008–2012**

Calendar Year	Estimated Injuries					
	Younger Than 15 Years of Age		12 Years of Age or Younger		Younger Than 5 Years of Age	
	Injuries Associated with All Toys	Injuries (%) Associated with Nonmotorized Scooters	Injuries Associated with All Toys	Injuries (%) Associated with Nonmotorized Scooters	Injuries Associated with All Toys	Injuries (%) Associated with Nonmotorized Scooters
2008	172,700	42,900 (25)	164,400	40,000 (24)	82,300	7,000 (9)
2009	185,900	49,500 (27)	177,800	45,900 (26)	90,600	8,100 (9)
2010	181,500	42,800 (24)	172,000	39,400 (23)	89,200	5,800 (7)
2011	193,200	49,300 (26)	184,100	45,600 (25)	92,200	7,600 (8)
2012	192,000	52,400 (27)	181,600	47,500 (26)	89,500	8,300 (9)

Source: NEISS, U.S. Consumer Product Safety Commission/EPHA. 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 five years of age from 2010 to 2012. It shows that the proportions of the estimated injuries related to this product code were very similar across different age groups between 2010 and 2012. In addition, there is not a statistically significant trend in the estimated injuries associated with this product code from 2010 to 2012 in any of the four age groups presented in Table 6. Please note that the injury estimates related to the product code, “Toys, Not Elsewhere Classified,” between 2010 and 2012 were not comparable to the estimates associated with this category of toys in 2009 or earlier.<sup>8</sup>

<sup>8</sup> Y. Tu, “Toy-Related Deaths and Injuries, Calendar Year 2010,” CPSC, October 2011.

**Table 6: Annual Emergency Department-Treated Injury Estimates Associated with Product Code, “Toys, Not Elsewhere Classified,” for Different Age Groups  
2010–2012**

Calendar Year	Estimated Injuries (%) 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
2010	8,500 (3)	7,000 (4)	6,800 (4)	3,400 (4)
2011	9,700 (4)	7,800 (4)	7,600 (4)	3,900 (4)
2012	6,500 (2)	5,200 (3)	4,900 (3)	2,700 (3)

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

The product code, “Toys, Not Specified,” was reinstated in 2010, to classify injuries that were associated with toys, but where the toys involved were not identified specifically in the NEISS injury narratives. 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 five years from 2010 to 2012. Table 7 shows that the proportions of the estimated injuries related to this product code were very close between 2010 and 2012 for all four age groups. There is not a statistically significant trend in the estimated number of injuries associated with the product code, “Toys, Not Specified,” from 2010 to 2012 for any of the four age groups specified in Table 7.

**Table 7: Annual Emergency Department-Treated Injury Estimates Associated with Product Code, “Toys, Not Specified,” for Different Age Groups  
2010–2012**

Calendar Year	Estimated Injuries (%) 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
2010	58,200 (23)	36,200 (20)	35,500 (21)	24,800 (28)
2011	60,000 (23)	38,900 (20)	38,700 (21)	27,700 (30)
2012	57,400 (22)	33,900 (18)	33,500 (18)	24,800 (28)

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

In 2010, CPSC staff conducted a special study of all injuries that were treated at the emergency departments of NEISS hospitals between July 1, 2010 and December 31, 2010, where the product involved was coded: “Toys, Not Specified.” The aim of this study was to identify the actual toys involved and to facilitate the characterization of toys with unknown classifications and the associated hazard patterns. All NEISS cases that were treated during that specific six-month period and were associated with the product code, “Toys, Not Specified,” were assigned for telephone in-depth investigations. During the telephone investigations, telephone interviewers asked the injury victim (or the victim’s caregiver, if the victim was a minor) about the incident scenario, how the injury occurred, what type of toy was

involved, the age of the toy, how the toy was obtained, and other questions regarding the characteristics of the toy. CPSC staff wrote a report to summarize the study design, telephone survey results, the estimating methods, and analysis results for this special study.<sup>9</sup>

The special study revealed that 19 percent of the estimated injuries, which were associated with the product code, “Toys, Not Specified,” during the special study period, did not involve a toy. Therefore, a 0.81 correction factor was introduced to adjust the injury estimates related to this product code.<sup>9</sup> Applying this correction factor to the toy-related injury estimates in 2012, and further extrapolating the distribution of toys identified from the special study to the injury estimate associated with the product code, “Toys, Not Specified,” in 2012, the adjusted toy-related injury estimates and the toy categories that were associated with the largest number of adjusted estimated injuries in 2012 are presented in Table 8 for all ages, children younger than 15 years, children 12 years of age or younger, and children younger than five years.

**Table 8: Toy-Related Injury Estimates Adjusted for the Correction Factor for Different Age Groups and Toy Categories Associated with the Most Adjusted Estimated Injuries 2012**

Toys	Adjusted Estimated Injuries (%)			
	All Ages	Younger Than 15 Years of Age	12 Years of Age or Younger	Younger Than 5 Years of Age
All Toys	254,300 (100)	185,700 (100)	175,400 (100)	84,900 (100)
Nonmotorized Scooters	60,700 (24)	52,800 (28)	47,900 (27)	8,600 (10)
Toy Balls	24,500 (10)	17,200 (9)	16,000 (9)	6,100 (7)
Toy Vehicles	24,000 (9)	15,300 (8)	15,100 (9)	11,400 (13)
Dolls, Plush Toys, and Action Figures	13,200 (5)	9,500 (5)	9,400 (5)	6,700 (8)

Source: NEISS, U.S. Consumer Product Safety Commission/EPHA. Estimates are adjusted for correction factor and rounded to the nearest 100.

Table 8 displays that the nonmotorized scooters, toy balls, toy vehicles, and “dolls, plush toys, and action figures” were associated with the most adjusted estimated injuries in 2012 for all individuals, children younger than 15 years of age, or children 12 years of age or younger. These four categories of toys accounted for nearly half of the adjusted estimated toy-related injuries for these three age groups. For children younger than five years of age, toy vehicles, nonmotorized scooters, “dolls, plush toys, and action figures,” and toy balls were associated with the most adjusted estimated injuries, and they represented 38 percent of the adjusted toy-related injuries in 2012.

It is worth noting that, after applying the correction factor and extrapolating the 2010 special study results to the toy-related injury estimates in 2012, only three to four percent of the 2012 adjusted toy-related injuries were associated with the product code, “Toys, Not Elsewhere Classified,” for the four age groups specified in Table 8. As for the product code, “Toys, Not Specified,” just two to three percent of the adjusted estimated toy-related injuries in 2012 were related to this product code for the four age groups listed in Table 8. Therefore, more than 90 percent of the adjusted toy-related injuries in 2012 could be attributed to established specified toy product codes.

<sup>9</sup> Y. Tu and S. Garland, “A NEISS Special Study, “Toys, Not Specified”: Analysis and Results,” CPSC, February 2012.

## Appendix A

### Estimated Number of Toy-Related Injuries from 1998 through 2012

Table 9 and Figure 3 display the annual emergency department-treated injury estimates associated with toys from 1998 through 2012. Statistically significant trends are observed in the data for all ages, children younger than 15 years of age, children 12 years or younger, and children younger than five years of age from 1998 to 2012.

Table 9 and Figure 3 show large increases in the annual estimated number of injuries for all ages, children younger than 15 years of age, and children 12 years or younger from 1999 to 2001. These increases are attributed primarily to rises in injuries associated with nonmotorized scooters.<sup>10,11,12</sup> During the most recent five years, 2008 to 2012, there is not a statistically significant trend in the estimated number of injuries related to nonmotorized scooters for all ages, children younger than 15 years of age, children 12 years of age or younger, or children younger than five years of age (see Table 5).

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<sup>10</sup> J. McDonald, "Toy-Related Deaths and Injuries, Calendar Year 2000," CPSC, November 2001.

<sup>11</sup> J. McDonald, "Toy-Related Deaths and Injuries, Calendar Year 2001," CPSC, October 2002.

<sup>12</sup> Y. Tu, "Toy-Related Deaths and Injuries, Calendar Year 2011," CPSC, November 2012.

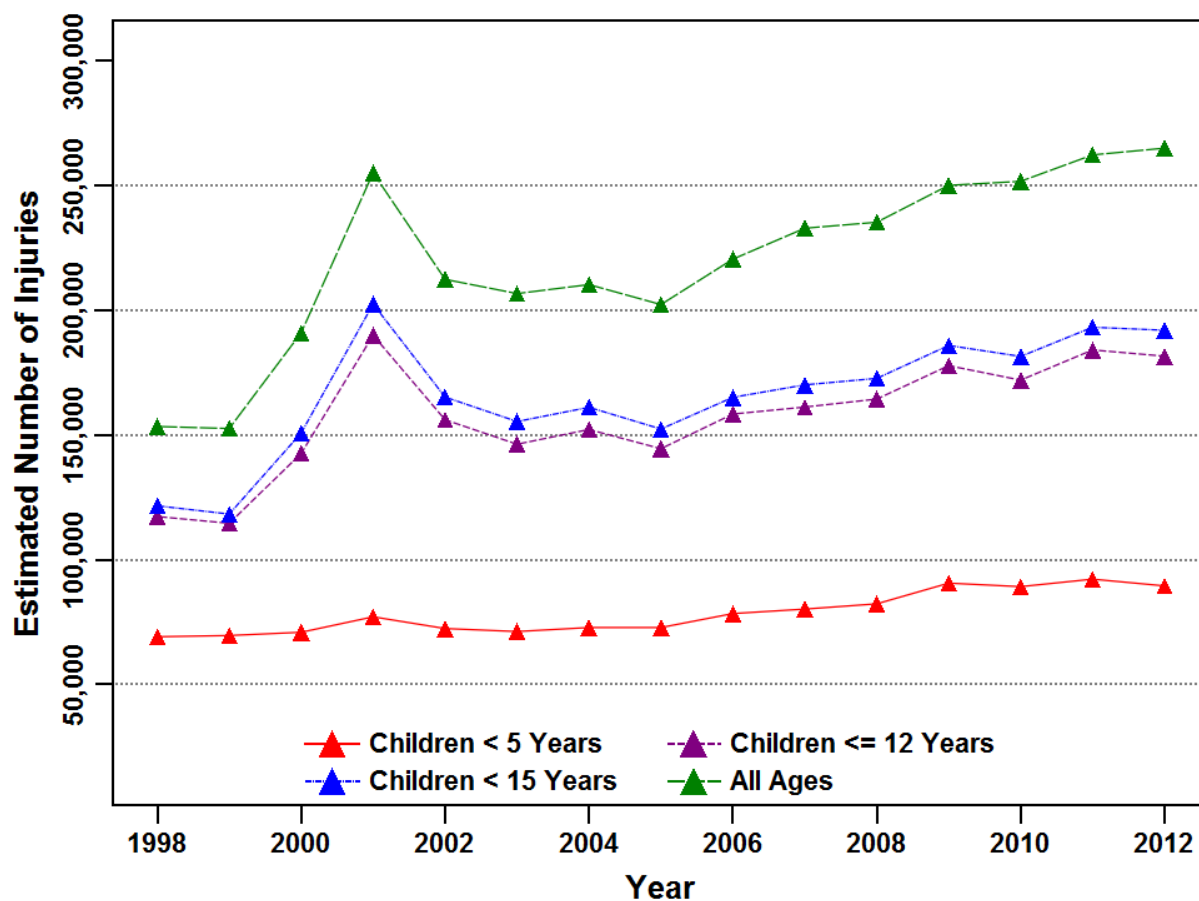
**Table 9: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups  
1998–2012**

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	95% Confidence Interval	Injury Estimate	95% Confidence Interval	Injury Estimate	95% Confidence Interval	Injury Estimate	95% Confidence Interval
1998	153,400	134,400–172,500	121,600	106,000–137,200	117,300	102,100–132,400	69,100	59,400–78,900
1999	152,600	134,400–170,800	118,300	103,000–133,700	114,600	99,600–129,500	69,600	60,000–79,200
2000	191,000	161,500–220,500	150,800	125,100–176,600	142,600	118,500–166,700	70,900	60,200–81,600
2001	255,100	221,100–289,100	202,500	171,700–233,300	190,000	160,600–219,400	77,100	65,600–88,600
2002	212,400	182,800–242,100	165,200	139,600–190,800	156,100	131,900–180,200	72,400	59,900–84,800
2003	206,700	177,500–235,900	155,400	132,000–178,900	146,300	124,300–168,400	71,200	59,500–82,800
2004	210,300	179,800–240,700	161,100	135,900–186,200	152,200	128,500–176,000	72,800	61,300–84,300
2005	202,300	175,100–229,500	152,400	129,700–175,100	144,500	122,500–166,600	72,800	61,800–83,800
2006	220,500	190,300–250,800	165,100	139,900–190,200	158,400	134,300–182,600	78,400	66,500–90,300
2007	232,900	200,000–265,700	170,100	144,600–195,700	161,200	136,900–185,500	80,200	67,700–92,600
2008	235,300	202,400–268,200	172,700	146,800–198,600	164,400	139,400–189,300	82,300	69,200–95,400
2009	250,100	214,100–286,000	185,900	156,600–215,100	177,800	149,800–205,800	90,600	76,100–105,100
2010	251,700	216,100–287,200	181,500	152,400–210,500	172,000	144,400–199,500	89,200	74,000–104,500
2011	262,300	225,400–299,200	193,200	162,500–223,900	184,100	154,400–213,800	92,200	74,900–109,600
2012	265,000	228,600–301,300	192,000	161,400–222,600	181,600	152,300–210,900	89,500	73,300–105,800

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

\*Tabulated estimates with confidence intervals for 1998–2012 were produced in July 2013.

**Figure 3: Toy-Related Emergency Department-Treated Injury Estimates for Different Age Groups  
1998–2012**





## Appendix B

### NEISS Product Codes for Toys as of January 1, 2012

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	Nonwheeled 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	Woodburning 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 (Nonprojectile)
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)
5011	Book Bags or Back Carriers (Excluding Baby Carriers, Luggage and Camping Equipment)
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)