



United States

Consumer Product Safety Commission

Pool or Spa Submersion: Estimated Nonfatal Drowning Injuries and Reported Drownings, 2025 Report

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*This report was prepared by the CPSC staff.
It has not been reviewed or approved by,
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Executive Summary

This report presents annual estimates of the number of emergency department-treated, pool- or spa¹-related, nonfatal drownings or submersion injuries² that occurred between 2022 and 2024, involving children younger than 15 years of age. The report also sets forth the counts of reported pool- or spa-related fatal drownings or submersion fatalities³ that happened between 2020 and 2022 to children younger than 15 years of age. In addition, the report details the subset of drowning injuries and fatalities involving children younger than 5 years of age, excluding cases involving suction entrapment.⁴ The time periods for the injury estimates and the fatality statistics presented in this report differ due to a lag in fatality reporting.

There were, on average, an estimated 6,300 pool- or spa-related, hospital emergency department (ED)-treated, nonfatal drowning injuries each year for 2022 through 2024, and 357 pool- or spa-related fatal drownings reported per year for 2020 through 2022, involving children younger than 15 years of age. Additionally, an annual average of 73 percent of the ED-treated nonfatal drowning injuries from 2022 through 2024, and 79 percent of the reported fatal drownings from 2020 through 2022, involved children younger than 5 years of age.

For children younger than 15 years old, from 2022 through 2024, 44 percent of the victims of estimated ED-treated pool or spa drowning injuries were either admitted to the hospital or treated and transferred to another hospital, compared to 4 percent of *all* consumer product-related, ED-treated injuries for this age group and time period.⁵

The total number of fatal drownings in 2022 (345 fatalities) was lower than the total number of fatal drownings in 2021 (386 fatalities).⁶ For children younger than 5 years of age, the total number of fatal drownings in 2022 (275 fatalities), was lower than the total number of fatal drownings in 2021 (287 fatalities).⁶

¹ The term “spa” is used to refer to spas and hot tubs.

² The term “submersion injury” is used instead of “nonfatal drowning” to maintain comparability with CPSC reports involving non-pool- or non-spa-related products or hazards.

³ The term “submersion fatality” is used instead of “drowning” to maintain comparability with CPSC reports involving non-pool- or non-spa-related products or hazards. The periods for reported injury and fatality statistics differ due to a lag in fatality reporting. Incidents covered by this report were associated with a pool or spa, but the primary cause of the incident was not necessarily the pool or spa product.

⁴ Note that circulation/suction entrapments in pools or spas are presented in a separate document: [“2014–2018 Reported Circulation/Suction Entrapment Incidents Associated with Pools, Spas, and Whirlpool Bathtubs, 2019 Report,” May 2019.](#)

⁵ Source: U.S. CPSC: NEISS

⁶ Yearly fatality counts reported here may differ from previous reports due to the ongoing nature of incident reporting. See the Appendix for more details.

Emergency Department-Treated Injury Estimates

For 2022 through 2024, an estimated annual average of 6,300 children younger than 15 years of age were treated in U.S. hospital emergency departments (EDs) for nonfatal injuries associated with pool or spa drownings. Estimates are shown in Table 1. Estimates are also provided for injured children younger than 5 years of age and children 5 to 14 years of age. Injury estimates are based on CPSC's National Electronic Injury Surveillance System (NEISS) data, where sampling weights are used to project the cases from NEISS hospitals to national estimates. For comparison, the corresponding annual average estimates for the preceding three-year period (2021 through 2023) were 6,500 children younger than 15 years of age and 5,000 children younger than 5 years of age treated in hospital emergency departments for nonfatal drowning injuries in pools or spas.

Table 1

**Estimated Number of ED-Treated Nonfatal Pool or Spa Drowning Injuries
Children Younger than 15 Years of Age, 2022-2024**

Year	Estimated Emergency Department-Treated Injuries		
	Younger than 5 Years	5-14 Years	Younger than 15 Years
Average	4,600	1,700	6,300
2024	4,300	1,900	6,200
2023	4,900	1,300	6,200
2022	4,500	1,900	6,400

Source: U.S. CPSC: NEISS. Appendix A details the methodology for data extraction.
Estimates for children under age 5 and ages 5 to 14 may not sum to the under-age-15 total due to rounding.
The estimates are rounded to the nearest hundred.

On average, from 2022 through 2024, 73 percent of children treated in EDs for pool- or spa-related, nonfatal drowning injuries were younger than 5 years of age. Children younger than 5 years of age constituted an estimated 71, 79, and 69 percent of the childhood pool- or spa-related ED-treated injuries in 2022, 2023, and 2024, respectively.

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Table 2 shows the percentages of the estimated totals for 2022 through 2024 that are associated with nonfatal pool or spa drowning injuries, by type of product. Spa-related drowning injuries constitute 5 percent of the estimated number of pool or spa ED-treated, nonfatal drowning injuries for children younger than 15 years of age, and 6 percent of the estimated number of pool or spa ED-treated, nonfatal drowning injuries for children younger than 5 years of age.

Table 2

Percent of Estimated ED-Treated Nonfatal Pool or Spa Drowning Injuries Children Younger than 15 Years of Age by Product Type, 2022-2024

Product Type	Estimated Emergency Department-Treated Injury Percentages		
	Younger than 5 Years	5-14 Years	Younger than 15 Years
Pool	94	99	95
Spa	6	1	5
Total	100	100	100

Source: U.S. CPSC: NEISS. Appendix A details the methodology for data extraction.

Percentages may not add up to 100 due to rounding or estimates of drowning injuries for children of unknown sex. In this table, 0 represents < 0.5%.

Table 3 shows the percentage of the estimated number of pool- or spa-related, nonfatal drowning injuries by sex. Overall, male children are more frequently treated for pool- or spa-related, nonfatal drowning injuries than female children. This is true of all injured children younger than 15, injured children between 5 and 14 years old, and injured children younger than 5 years of age.

Table 3

Percent of Estimated ED-Treated Nonfatal Pool or Spa Drowning Injuries Children Younger than 15 Years of Age by Sex, 2022-2024

Sex	Estimated Emergency Department-Treated Injury Percentages		
	Younger than 5 Years	5-14 Years	Younger than 15 Years
Male	53	57	54
Female	47	43	46
Total	100	100	100

Source: U.S. CPSC: NEISS. Appendix A details the methodology for data extraction.

Percentages may not add up to 100 due to rounding or estimates of drowning injuries for children of unknown sex.

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Table 4 shows the percentage of the estimated number of pool- or spa-related, nonfatal drowning injuries by ethnicity and race. For more than 40 percent of estimated nonfatal drowning injuries involving children under 15 years of age, the victim's ethnicity was unspecified, while 11 percent of estimated nonfatal drowning injuries involved Hispanic victims and 48 percent of estimated nonfatal drowning injuries involved non-Hispanic victims. Focusing on injuries that exclusively involved children of known ethnicities, 19 percent of victims under 15 years of age were Hispanic (compared to 26 percent of the population for that age), and 81 percent of victims under 15 years of age were non-Hispanic (compared to 74 percent of the population for that age). The victim's race was also unspecified for 42 percent of estimated nonfatal drowning injuries involving children under 15 years of age. Focusing on those injuries where race was known, 75 percent were White (compared to 70 percent of the population for that age), 17 percent were Black (compared to 16 percent of the population for that age), and 4 percent were Asian (compared to 6 percent of the population for that age) for children less than 15 years old.⁷ However, these findings are not definitive, given the high proportion of unspecified ethnicities and races.

Table 4

Percent of Estimated ED-Treated Nonfatal Pool or Spa Drowning Injuries Children Younger than 15 Years of Age by Ethnicity and Race, 2022-2024

Ethnicity	Race	Estimated Emergency Department-Treated Injury Percentages		
		Younger than 5 Years	5-14 Years	Younger than 15 Years
Hispanic ⁸		19	20	19
	Not stated	26	15	22
	White	60	70	64
	Black/African American	4	3	4
	Asian	0	1	1
	Other	9	11	10
	American Indian/Alaska Native	-	-	-
	Native Hawaiian/Pacific Islander	-	-	-

⁷ Demographic percentages are based on <https://www2.census.gov/programs-surveys/popest/datasets/2020-2023/national/asrh/nc-est2023-alldata-r-file06.csv>, <https://www2.census.gov/programs-surveys/popest/datasets/2020-2023/national/asrh/nc-est2023-alldata-r-file08.csv>, <https://www2.census.gov/programs-surveys/popest/datasets/2020-2023/national/asrh/nc-est2023-alldata-r-file10.csv>, and <https://www.census.gov/data/tables/time-series/demo/popest/2020s-national-detail.html>.

⁸ These percentages exclude the percentage of estimated injuries involving victims of unknown ethnicity for the Younger than 5, 5-14, and Younger than 15 age groups (44, 31, and 40 percent, respectively).

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Non-Hispanic⁷		81	80	81
	Not stated	11	4	9
	White	72	53	66
	Black/African American	14	30	19
	Asian	1	12	4
	Other	1	0	1
	American Indian/Alaska Native	-	1	0
	Native Hawaiian/Pacific Islander	1	-	1
All	Total	100	100	100
	Not stated	48	28	42
	White	42	44	43
	Black/African American	7	17	10
	Asian	0	8	2
	Other	2	2	2
	American Indian/Alaska Native	-	1	0
	Native Hawaiian/Pacific Islander	0	-	0

Source: U.S. CPSC: NEISS. Appendix A details the methodology for data extraction.
Percentages may not add up to 100, due to rounding: In this table, 0 represents < 0.5%.
“-” denotes no data recorded.

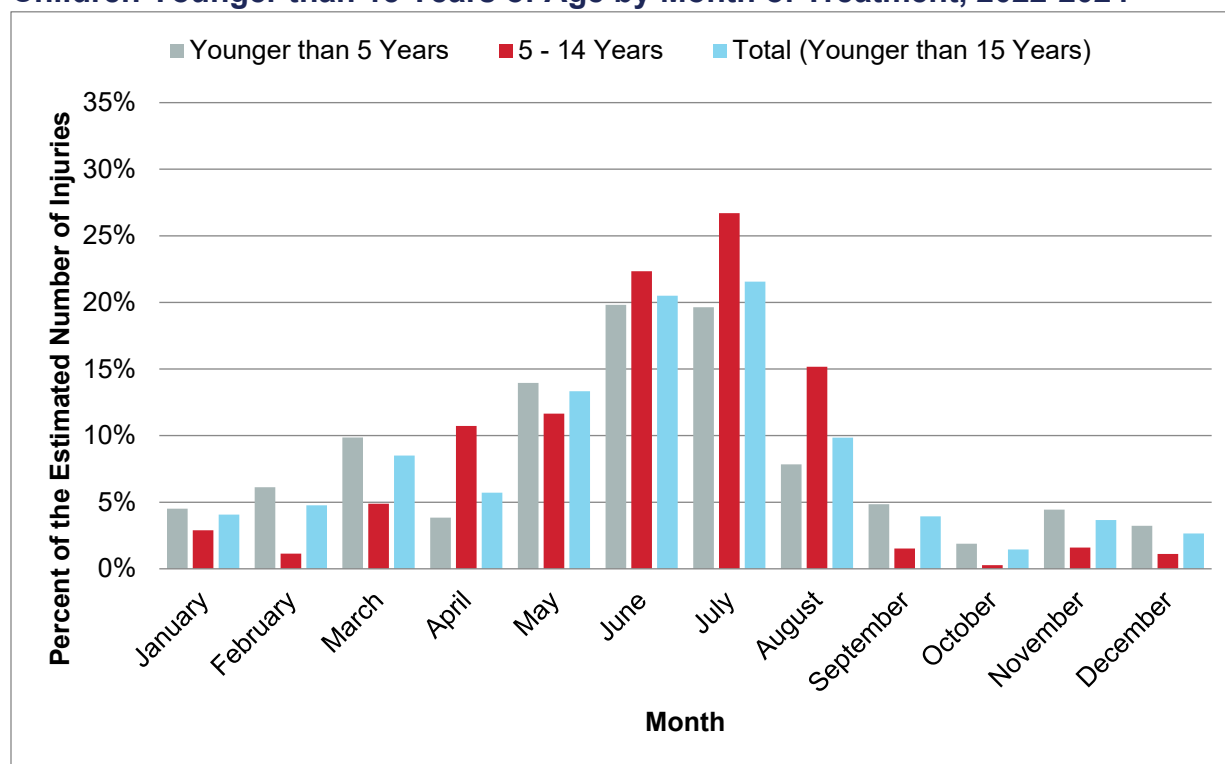
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Figure 1 illustrates the monthly distribution of the percentages of the estimated ED-treated, nonfatal drowning injuries for each age group. The months of May, June, July, and August consistently had the largest percentages across all age groups.

Figure 1

Percent of Estimated ED-Treated Nonfatal Pool or Spa Drowning Injuries Children Younger than 15 Years of Age by Month of Treatment, 2022-2024



Source: U.S. CPSC: NEISS.

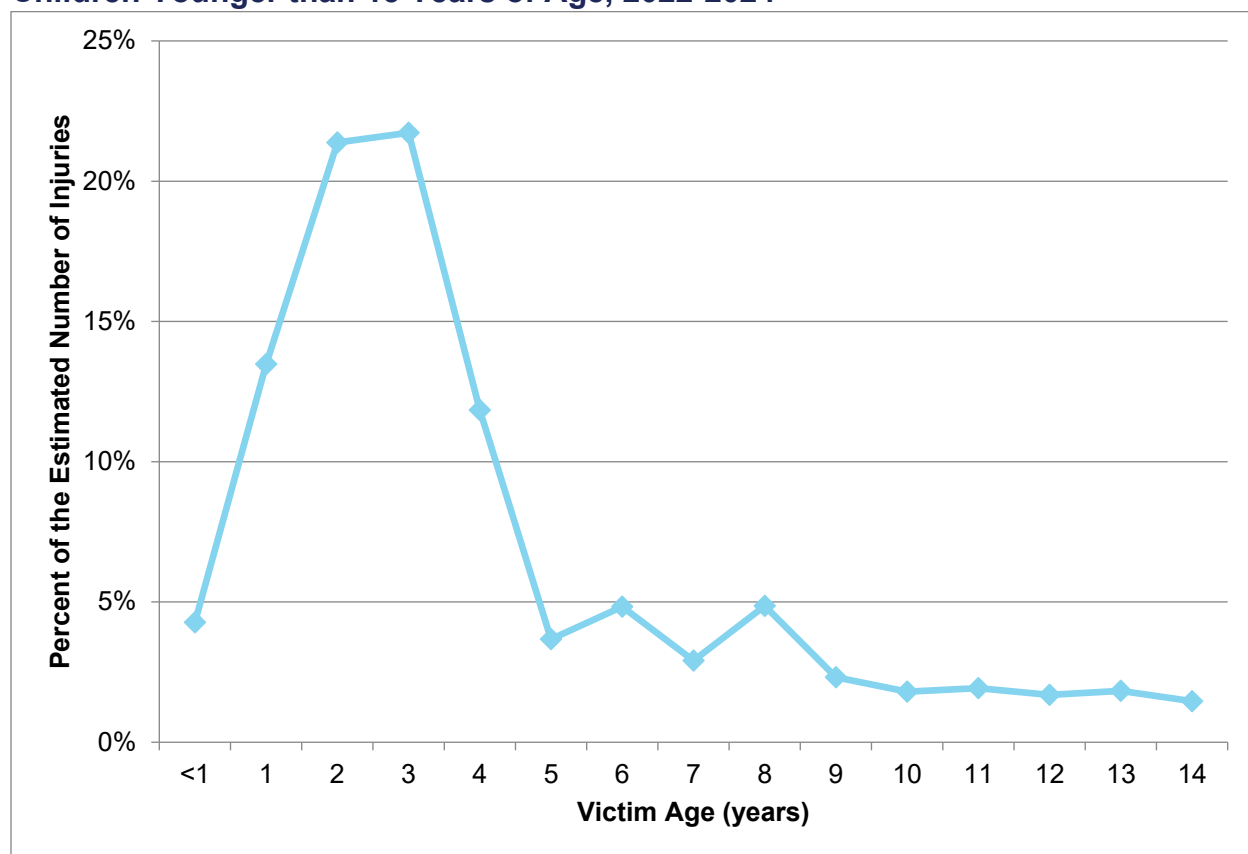
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Figure 2 plots the percentage of the estimated number of ED-treated, pool- or spa-related, nonfatal drowning injuries by victims' age, comprising children younger than 1 year of age at 4 percent, children between the ages of 1 and 3 years (12 to 47 months) at 57 percent, children 4 years of age (48 to 59 months) at 12 percent, and children between the ages of 5 to 9 and 10 to 14 years old at 19 and 9 percent, respectively.

Figure 2

Percent of Estimated ED-Treated Nonfatal Pool or Spa Drowning Injuries by Age Children Younger than 15 Years of Age, 2022-2024



Source: U.S. CPSC: NEISS.

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Table 5 breaks down the estimated ED-treated pool or spa drowning injuries by disposition. From 2022 through 2024, children younger than 15 years of age were admitted to the hospital, or treated and transferred to another hospital, 44 percent of the time. In 2024 alone, children younger than 15 years of age were admitted to the hospital, or treated and transferred to another hospital, 46 percent of the time. In contrast, for *all* consumer product-related, ED-treated injuries to children younger than 15 years of age, only 4 percent of them were admitted to the hospital or treated and transferred.⁵ For Dead on Arrival (DOA), or Died in Emergency Department percentages, drowning victims younger than 5 years of age composed most of all child drownings (see Table 7). The deaths recorded in NEISS are also included in the fatality count in the section on reported fatalities discussed later in this report.

Table 5

Percent of Estimated ED-Treated Pool or Spa Drowning Injuries Children Younger than 15 Years of Age by Disposition, 2022-2024

Disposition	Estimated Emergency Department-Treated Injury Percentages		
	Younger than 5 Years	5–14 Years	Younger than 15 Years
Examined or Treated and Released	49	58	51
Admitted to Hospital	36	26	33
Treated and Transferred	9	15	11
DOA or Died in Emergency Department	3	1	2
Held for Observation	1	0	1
Left Without Being Seen	2	0	1
Total	100	100	100

Source: U.S. CPSC: NEISS. Appendix A details the methodology for data extraction.
Percentages may not add up to 100, due to rounding: In this table, 0 represents < 0.5%.

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Table 6 shows the percentages of the estimated number of injuries for each age group by the location of the drowning incident. Overall, 37 percent of the incidents involving injuries that led to emergency department visits occurred at a residence. For injured children younger than 5 years of age, 43 percent of incidents occurred in residential locations while 23 percent of incidents occurred in public locations. Conversely, for injured children 5 to 14 years of age, 53 percent of incidents occurred in public locations. In 2024 alone, for all children younger than 15 years of age, 38 percent of the incidents involving ED-treated injuries occurred at a residence, an increase of 1 percent from 2023 (37%).

Table 6

Percent of Estimated ED-Treated Nonfatal Pool or Spa Drowning Injuries Children Younger than 15 Years of Age by Location, 2022-2024

Location	Estimated Emergency Department-Treated Injury Percentages		
	Younger than 5 Years	5–14 Years	Younger than 15 Years
Residential	43	19	37
Undisclosed Location	34	28	32
Public	23	53	31
Total	100	100	100

Source: U.S. CPSC: NEISS. Appendix A details the methodology for data extraction.
Percentages may not add up to 100, due to rounding.

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Reported Fatalities⁹

On average, 357 fatalities associated with pool or spa drownings involving children younger than 15 years of age were reported to CPSC staff annually from 2020 through 2022. The years for the injury estimates in the previous section and the fatality statistics presented here differ due to a lag in fatality reporting.

Reported fatality frequencies by year and age category are shown in Table 7. Seventy-nine percent of the victims of the reported pool- or spa-related, childhood drowning fatalities were younger than 5 years of age. As noted in the NEISS injury estimates section, victims in this age category also accounted for an average of 73 percent of the childhood drowning injuries related to pools or spas between 2022 and 2024. Cases in NEISS that were classified as DOA, or died in the ED, are included in fatality case counts for their respective years (in addition to their inclusion in the ED injury estimates).

The 1,064 reported fatal drowning incidents involving children under the age of 15 from 2020 through 2022 resulted in the deaths of 1,072 children. Of those fatal incidents 1,051 (99 percent of the incidents) involved a single victim under the age of 15, 7 incidents involved two victims under the age of 15, 5 incidents involved one victim under the age of 15 (who was included in the count) plus additional victims who were 15 years of age or older, and therefore, excluded from the counts, and 1 incident involved two victims under the age of 15 plus an additional victim who was 15 years of age or older, and therefore, excluded from the counts.

Table 7

Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Children Younger than 15 Years of Age, 2020-2022

Year ¹⁰	Reported Fatality Frequencies			
	Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
Average¹¹	281	57	20	357
2022	275	51	19	345
2021	287	74	25	386
2020	280	46	15	341
Totals 2020-2022	842	171	59	1,072

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

⁹ The numbers of fatal drownings related to pools or spas presented in this section are based on all incidents reported to CPSC staff. These numbers are considered minimum counts only, derived from anecdotal data, and cannot be used to determine trends in the U.S. population.

¹⁰ Since reporting is ongoing, the number of reported fatalities may change in the future.

¹¹ Row averages may not add to total, due to rounding.

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Table 8 provides information on the interval between the drowning incident and the time of death for pool- or spa-related fatal drownings. In some instances, a great deal of time may lapse from the drowning incident to death, sometimes years. For most of the fatalities (71 percent), the date of death was either the same as the date of the incident or one day later. For children under 5 years old and children 5 to 9 years old, the percentage of children who died on the same day as the date of the incident or one day later was 71 and 75 percent, respectively. By contrast, for children 10 to 14 years old, the percentage of children who died on the same day as the date of the incident or one day later was somewhat lower (64 percent).

Table 8

Percentage of Drowning Deaths Reported to CPSC Staff with Pools or Spas Children Younger than 15 Years by Days Between Incident and Death, 2020- 2022¹²

Days Between Incident & Death	Percentage of Reported Fatalities			
	Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
0 days	64	67	58	64
1 day	7	8	7	7
2–7 days	22	20	31	22
8–31 days	4	4	5	4
> 31 days	2	1	-	2
Total	100	100	100	100

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

"-" denotes no data recorded.

Percentages may not add up to 100, due to rounding and refer to percentages within each age group.

¹² Note that the age at time of death is used to determine the appropriate age category. In most cases, the difference between the date of incident and date of death is not sufficient to change the age category. There were 22 fatalities where the difference was more than 31 days.

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Reported fatal drownings to children younger than 15 years old occurred predominantly in pools. A small number of fatal drownings to children younger than 15 years old were associated with spas (47). Children younger than 5 years of age accounted for 96 percent of the reported spa-related drowning deaths. Table 9 presents these percentages by product type.

Table 9

Percentage of Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Involving Children Younger than 15 Years by Product Type, 2020-2022

Product	Percentage of Reported Fatalities			
	Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
Pool	95	100	97	96
Spa	5	-	3	4
Total	100	100	100	100

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

"-" denotes no data recorded.

Percentages may not add up to 100, due to rounding and refer to percentages within each age group.

Table 10 gives the percentages of pool or spa drowning deaths by age and sex. For all age groups under age 15, there were more reported male drowning victims than reported female drowning victims. This is consistent with the injury data, which show that more male children were treated in emergency departments for pool- or spa-related drowning injuries.

Table 10

Percentage of Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Involving Children Younger than 15 Years of Age by Sex, 2020-2022

Sex	Percentage of Reported Fatalities			
	Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
Male	66	71	73	67
Female	34	29	27	33
Total	100	100	100	100

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

Percentages may not add up to 100, due to rounding and refer to percentages within each age group.

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Reported fatality frequencies by ethnicity and race are shown in Table 11. Approximately 46 percent of drowning deaths for children under 15 years of age involved victims of unknown ethnicity, 14 percent of drowning deaths involved Hispanic victims, and 39 percent of drowning deaths involved non-Hispanic victims. Among victims with known ethnicity, 27 percent of the drowning deaths involved Hispanic victims (compared to 26 percent of the U.S. population). For drowning deaths involving all children under 15 years of age, 23 percent involved victims whose race was unspecified. For all drowning deaths involving children of known races under 15 years of age, white victims constituted the highest percentage at 59 percent (compared to 71 percent of the population for that age), and Black/African American victims made up the second highest percentage at 26 percent (compared to 16 percent of the population for that age). For drowning deaths involving children between the ages of 5 and 14, race was unspecified for 31 percent of the victims. For all drowning deaths involving children between the ages of 5 and 14 whose race was specified, black victims made up the highest percentage at 49 percent, which is about three times the population for that age (15 percent), whereas white victims constituted the second highest percentage at 32 percent (compared to 71 percent of the population for that age). For drowning deaths involving all children under 5 years of age, race was unspecified for 21 percent of the victims. For all drowning deaths involving children under 5 years of age whose race was specified, white victims constituted the highest percentage at 66 percent (compared to 69 percent of the population for that age), and Black/African American victims made up the second highest percentage at 20 percent (compared to 16 percent of the population for that age).¹³

Table 11

Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Children Younger than 15 Years of Age by Ethnicity and Race, 2020-2022

Ethnicity	Race	Reported Fatality Frequencies			
		Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
Hispanic		134	14	7	155
	Not stated	22	3	2	27
	White	70	7	3	80
	Black/African American	5	1	0	6
	Asian	0	0	0	0
	Other	36	3	1	40

¹³ Demographic percentages are based on <https://www2.census.gov/programs-surveys/popest/datasets/2020-2023/national/asrh/nc-est2023-alldata-r-file02.csv>, <https://www2.census.gov/programs-surveys/popest/datasets/2020-2023/national/asrh/nc-est2023-alldata-r-file04.csv>, and <https://www2.census.gov/programs-surveys/popest/datasets/2020-2023/national/asrh/nc-est2023-alldata-r-file06.csv>.

	American Indian/Alaska Native	0	0	0	0
	Native Hawaiian/Pacific Islander	1	0	1	2
Non-Hispanic		298	90	32	420
	Not stated	31	7	3	41
	White	181	23	4	208
	Black/African American	54	45	20	119
	Asian	8	4	1	13
	Other	17	8	4	29
	American Indian/Alaska Native	2	1	0	3
	Native Hawaiian/Pacific Islander	5	2	0	7
All¹⁴	Total	842	171	59	1072
	Not stated	178	53	19	250
	White	437	39	11	487
	Black/African American	134	57	21	212
	Asian	14	7	1	22
	Other	65	12	6	83
	American Indian/Alaska Native	7	1	0	8
	Native Hawaiian/Pacific Islander	7	2	1	10

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

¹⁴ Includes 497 drowning deaths involving victims of unknown ethnicities.

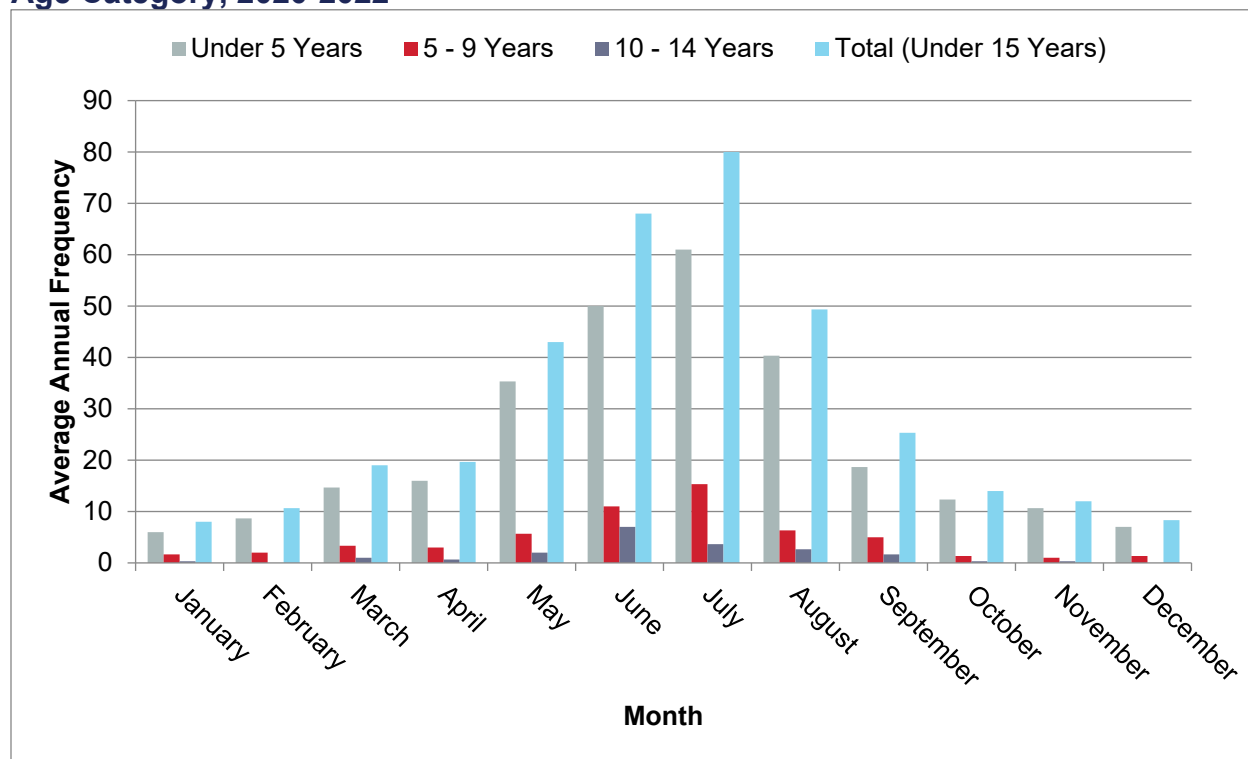
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Figure 3 illustrates the monthly distribution of reported pool- or spa-related childhood drownings categorized by age. As expected, the U.S. summer months of May, June, July, and August had the largest annual fatality frequencies for all age groups.

Figure 3

Average Annual Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Involving Children Younger than 15 Years of Age by Month of Death and Age Category, 2020-2022



Source: U.S. CPSC: CPRMS.

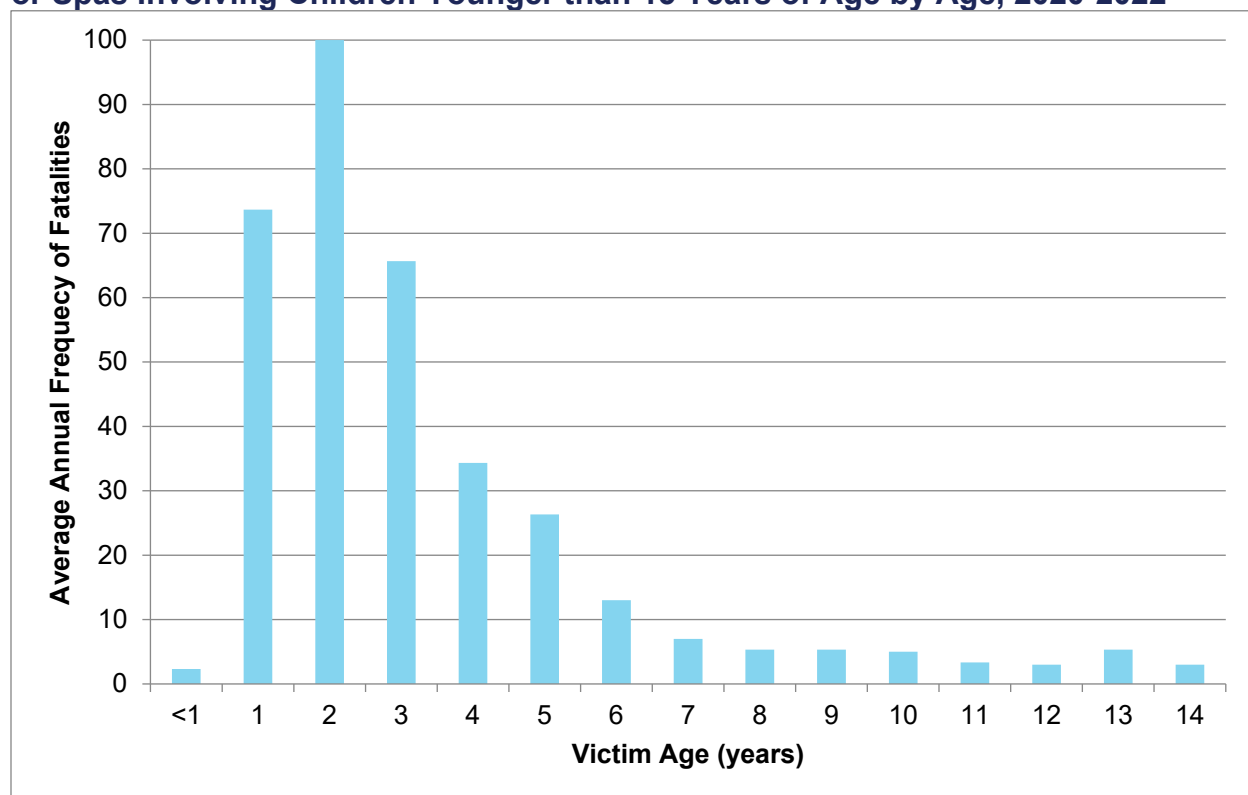
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Figure 4 shows the annual average of reported pool or spa drownings in children younger than 15 years old as a frequency distribution of the victim's age. Children between the ages of 1 and 3 years (12 to 47 months) composed approximately 68 percent of the reported pool or spa drowning fatalities. The graph shows a sharp decrease after age 2 (less than or equal to 35 months).

Figure 4

Average Annual Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Involving Children Younger than 15 Years of Age by Age, 2020-2022



Source: U.S. CPSC: CPRMS.

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Table 12 records the percentages of reported pool or spa drownings by incident location. Most of the reported deaths (74 percent) occurred in residential settings, such as the victim's home, the house of a family member/friend/acquaintance, or a neighbor's residence. The victim's home accounts for the largest percentage (52 percent) of all location categories for victims younger than 15 years of age. For children 5 to 9 years of age and children 10 to 14 years of age, the public/community/business location accounted for the largest percentage of reported drownings of known locations.

Table 12

Percentage of Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Involving Children Younger than 15 Years of Age by Incident Location, 2020-2022

Location	Percentage of Reported Fatalities			
	Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
Home	61	21	19	52
Family/ Friend/ Acquaintance	19	2	3	16
Neighbor	6	7	2	6
Public/ Community/ Business ¹⁵	7	33	37	13
Undisclosed Location	7	36	39	14
Total	100	100	100	100

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

Percentages may not add up to 100, due to rounding and refer to percentages within each age group.

¹⁵ Condominium and apartment complex pools are included in this category.

Table 13 presents the percentages of reported fatal drownings by pool/spa type. The in-ground product type accounted for the largest percentage of known pool/spa types (53 percent for victims younger than 15). This was followed by the above-ground pool category, portable pool category, and outside home spa pool category for cases where pool/spa type was known.

Table 13

Percentage of Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Involving Children Younger than 15 Years of Age by Specific Pool/Spa Type Product Category, 2020-2022

Location	Percentage of Reported Fatalities			
	Younger than 5 Years	5–9 Years	10–14 Years	Younger than 15 Years
In-Ground (Pool Only)	53	53	49	53
Undisclosed Pool/Spa Type	16	44	44	22
Above-Ground (Pool Only)	21	2	3	17
Portable ¹⁶ (Pool Only)	5	1	-	4
Outside Home (Spa Only)	5	-	3	4
Inside Home (Spa Only)	0	-	-	0
Total	100	100	100	100

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction.

Percentages may not add up to 100 due to rounding and refer to percentages within each age group: In this table, 0 represents < 0.5%; “-” denotes no data recorded.

¹⁶ A “portable pool” is defined as any pool that can be set up/taken down or moved to another location with relative ease.

Because the majority of reported fatal drowning victims involving children younger than 15 years of age were younger than 5 years of age, common scenarios for such children drowning in pools or spas (842 reported drownings) were classified in Table 14. The highest percentage of the reports (62 percent) attributed the incident to a gap in adult supervision (an adult losing contact or knowledge of the whereabouts of the child, and during that period, the child managed to access the pool/spa). Another common scenario—12 percent of the reports—involved observation of the victim close to the pool/spa, with the victim last seen in the pool/spa, or near the pool/spa, before the incident occurred. Nine percent of the reports indicated barrier compromise or circumvention. In 17 percent of the reports, there was insufficient information available to determine the scenario.

Table 14

Percentage of Drowning Deaths Reported to CPSC Staff Associated with Pools or Spas Children Younger than 5 Years of Age by Scenario, 2020-2022

Scenario	Percentage of Reported Fatalities for Pools and Spas
Lost Contact or Knowledge of Whereabouts	62
Not Enough Information to Determine Scenario	17
Observed Near Pool/Spa or In Pool/Spa Prior to Incident	12
Barrier Integrity or Circumvented Barrier	9

Source: U.S. CPSC: CPSRMS. Appendix A details the methodology for data extraction. Percentages may not add up to 100, due to rounding.

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Appendix A

“Drowning” is defined as the process of experiencing respiratory impairment from submersion/immersion in liquid. Drowning outcomes can result in “death,” “no morbidity,” or “morbidity” (further categorized as “moderately disabled,” “severely disabled,” “vegetative state/coma,” and “brain death”).¹⁷

Methodology for Pool or Spa Submersion: Estimated Nonfatal Drowning Injuries

Injury estimates came from NEISS data extracted on April 7, 2025, for calendar year 2024. The NEISS product codes used for the data were 3251 (Built-in pools), 3221 (Above-ground pools), 5043 (Portable pools), 1284 (Pools, not specified), 3274 (Swimming, activity) and 698 (Hot tubs and Spas). Diagnoses codes of 69 (Submersions), 65 (Anoxia), and 42 (Aspirated on) were also used, along with the age constraint of “children younger than 15 years of age,” to restrict the extracted data to the population of interest. Cases involving the activity of swimming were reviewed for potential inclusion in the data set. NEISS data from 2022 and 2023 were also used from last year’s report to cover the 2022 through 2024 timeframe. NEISS data are from a probability-based sample. Sampling weights are used to project the cases from NEISS hospital-treated injury cases to national estimates. Because incidents in NEISS are unique, there were no duplicates.

The estimated numbers of emergency department-treated injuries are rounded to the nearest hundred. Because NEISS is a weighted sample, injury category percentages were based on the category weighted estimate (unrounded), divided by the total weighted estimate (unrounded), rounded to the nearest integer.

Historical Estimates

At the time of this report (May 2025), injury estimates cannot be used for trend analyses since a new sampling frame was used for the NEISS 2024 estimated injury data. Trend analyses or declarations about statistical significance of year-over-year trends are unavailable in this report but will be recomputed in future reports.

¹⁷ CPSC avoids use of terms such as “near,” “wet,” “dry,” “active,” “passive,” “silent,” and “secondary” drowning when referring to submersion injuries and fatalities, in line with the AAP’s recommendations: <https://pediatrics.aappublications.org/content/126/1/178>.

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Methodology for Pool or Spa Submersion: Reported Drownings

Data were extracted on March 24, 2025, from CPSC's Consumer Product Safety Risk Management System (CPSRMS) for pool- or spa-related submersion deaths involving children younger than 15 years of age for the years 2020 to 2022. These data were merged with data from last year's report for 2020 and 2021, to cover the 2020 through 2022 reporting period. It should be noted that for a given year, date of death was used to determine the appropriate year category. As incident reporting is ongoing, additional reports received for prior years are updated in subsequent reports. For the most recent period, two incident reports in 2020 and six incident reports in 2022 were received since publication of the last report and were updated in this one.¹⁸

Fatal incidents associated with product codes 3251 (Built-in pools), 3221 (Above-ground pools), 5043 (Portable pools), 1284 (Pools, not specified), 3274 (Swimming, activity), and 698 (Hot tubs and Spas) were examined for inclusion in counts. Information from these cases was extracted into an Excel spreadsheet and sorted by date and incident location. CPSRMS contains various types of submitted voluntary information, including reports from consumers through the public-facing component [SaferProducts.gov](https://www.saferproducts.gov), newspaper clippings, state/local authorities, medical examiners, advocacy groups, and national death certificates. However, because of the voluntary and anecdotal nature of these reports, staff cannot be sure that information on all the deaths has been received. Additionally, since pool drowning incidents are notable events in the community where they occur, there were often multiple news reports, a medical examiner's report, a death certificate, an in-depth investigation, and less frequently, a hospital emergency department report (NEISS) for a single incident. As a result, source documents were checked to eliminate duplicate incident reports.

¹⁸ [Pool or Spa Submersion: Estimated Nonfatal Drowning Injuries and Reported Drownings, 2024 Report](#)