



IMPROVING
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SAFETY

Summer Safety: Product Injury Patterns for Children

Report by:
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Executive Summary

Summer is a time for children to explore outdoors and enjoy seasonal toys and activities. While children's products provide a fun experience that contributes to their development, some toys and other products have hidden hazards and can pose risks for children. Similarly, tools and equipment for the home or garden commonly used during the summer months can cause unintentional injury. This report takes a look at popular summer activities and consumer products that often accompany those activities.

Each section will focus on a specific activity. The sections include official injury statistics and associated hazards, Consumer Product Safety Commission (CPSC) recalls of specific products, as well as tips and recommendations to prevent injury. Knowing and appreciating the common injuries, important product recalls, and proper precautions to take will keep summer fun safe

Findings:

- According to CPSC data, injuries to children ages 14 and under are most likely to happen in the summer months.
- Playground activities, biking and swimming are the summer activities most responsible for injuries to children.
- Simple yet effective safety tips can prevent injuries. For instance, nearly 70 percent of all fatal bicycle crashes involve head injuries. Wearing a properly fitted bicycle helmet can reduce the risk of a brain and head injury by as much as 85 percent.

KID recommends:

- Report any problems with products to [SaferProducts.gov](https://www.saferproducts.gov).
- Children's product testing should include analysis that reviews how a child will interact with a product and what might be done to minimize hazards.
- Routinely check the CPSC website for recall notices. Children's products are recalled on average of twice a week and many of them are common summer toys and items.
- If you own a product that is recalled, stop using it. Consult the CPSC website or the manufacturer for refund or repair instructions. It is illegal to resell a recalled product.
- Always provide the appropriate supervision depending on the activity and your child's developmental stage. Be alert to what they might encounter at a friend or neighbor's house, such as pools or trampolines and provide guidance for their use.

Last but not least, the summer is a time for fun. All activities – from biking to swimming to camping to playing sports – should be embraced and enjoyed by our children. Taking precautions and understanding hazards can allow children to enjoy summer without the risk of serious injury.

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Bicycles & Accessories

Injury Statistics

Bicycles and accessories	2012	2011	2010	2009	2008
Ages 0-4	28,095	29,525	28,760	28,475	28,429
Ages 5-14	192,312	199,406	206,546	218,626	200,894

**Estimated injury statistics provided by NEISS*

Riding a bike is a classic American summer time activity. Safe Kids USA shows that each month 3 out of 4 children in the US will ride a bike.¹ It provides kids a great way to be active and engage in visual-spatial acts and balance. Bicycling, however, is associated with high risk.

Other than automobile related incidents, bicycles cause more children's injuries than any other product and are the leading cause for emergency room visits. NEISS estimates that in 2012, 28,095 children between ages 0 and 4 were involved in bicycle accidents resulting in injury.

In that same year, 40,511 kids under 14 sustained skateboard injuries, and 5,283 had skating injuries. More children ages 5-14 are seen in emergency departments for biking injuries than any other activity.



Product Recalls

On April 17, 2013, the 2012 Huffy® 20-Inch Slider Tricycle was recalled due to the handlebar which can unexpectedly loosen while in use, causing the rider to lose control. This poses crash and fall hazards for the rider.²

On January 11, 2012 the Chariot Carriers® bicycle trailer and bicycle trailer conversion kit was recalled due to faulty hitch mechanisms that can crack and break, causing the trailer to detach from the bicycle.³ This poses an injury hazard to children in the bicycle trailer. Chariot has received 24 incidents worldwide.

Safety Measures and Recommendations

The CPSC recommends that properly fitting, CPSC approved bicycle helmets are worn by both adults and children. Nearly 70 percent of all fatal bicycle crashes involve head injuries. Wearing a properly fitted bicycle helmet can reduce the risk of a brain and head injury by as much as 85 percent. When buying a helmet look for the label that reads "Complies with U.S. CPSC Safety Standards for Bicycle Helmets."⁴

Before riding, be sure that the bikes are roadworthy. Tires should be checked and pumped every season, and as needed after that. Additionally, check that the seat and handlebars are tight, and that the brakes are working. Wearing reflective and fluorescent clothing, adorning the bicycle with reflectors, and using active flashing devices will help increase visibility and reduce the risk of collision with automobiles. Low to the ground tricycles and riding toys can be made safer with the addition of a tall flag to make sure vehicles can see the rider.

Swimming & Water Activities

Injury Statistics

Swimming, pools, equipment	2012	2011	2010	2009	2008
Ages 0-4	18,612	18,294	20,477	17,009	14,120
Ages 5-14	79,751	76,792	82,543	62,536	65,494

Estimated injury statistics provided by NEISS

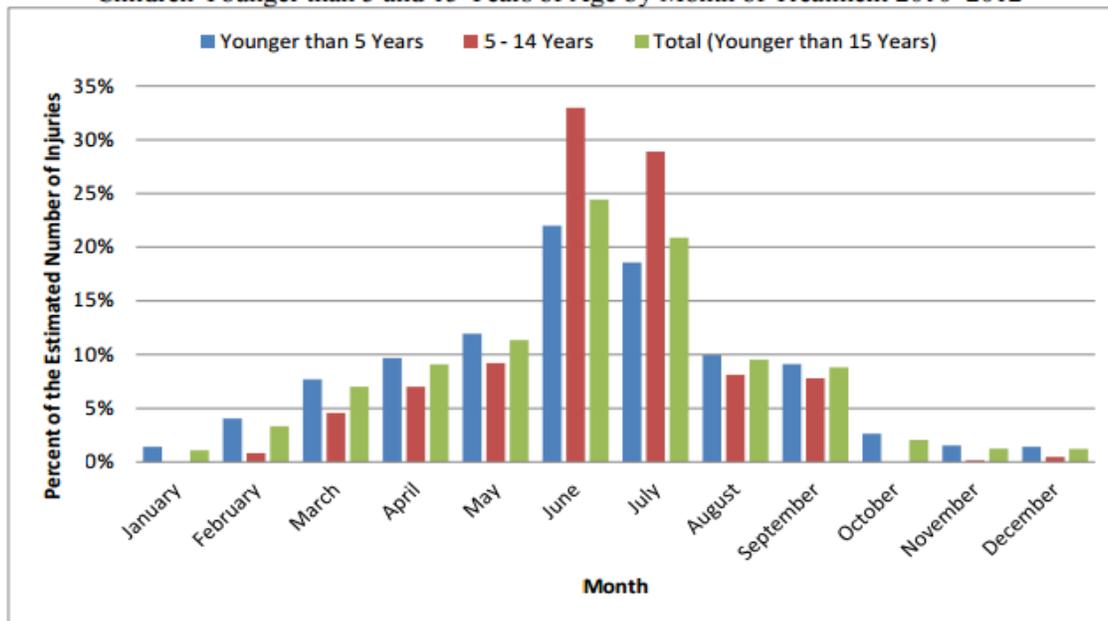
Backyard and public pools offer easy relief from the summer heat and provide families a great way to enjoy their time together. Unfortunately the risk water activities pose to children is high. According to the CDC, drowning is the leading cause of injury death for those 1 to 4 years of age.

Annually, CPSC reports that nearly 300 children under the age of five drown in a pool or spa and another 5,100 children under the age of 15 go to hospital emergency rooms for near-drowning injuries. In 2012 alone, NEISS estimates that there were 18,612 swimming related injuries in children ages 0-4. Children between the ages of 1 and 3 and African American children between the ages of 5 and 19 are most at risk of drowning.⁵

Summertime poses an increased risk. From Memorial Day through Labor Day 2013, at least 202 children between the ages of 1 and 14 drowned in a swimming pool or spa in the United States, according to media reports compiled by the USA Swimming Foundation. Of those, 143 of the victims were children younger than age 5.⁶

Figure 1 illustrates the seasonal distribution of the percentages of the estimated emergency department-treated submersion injuries for each age group. The months of May, June, July, and August had the largest percentages.

Figure 1
Percent of Emergency Department-Treated Pool or Spa Submersion Injuries
Children Younger than 5 and 15 Years of Age by Month of Treatment 2010–2012



Source: U. S. Consumer Product Safety Commission: National Electronic Injury Surveillance System (NEISS).

Product Recalls

In 2012, an inflatable in-ground pool slide was recalled following an adult woman’s death due to neck injury. Banzai Splash inflatable pool slides have been sold at Wal-Mart and Toys.

Inflatable pool toys, while fun and alluring to children, pose the risk of suffocation in a collapsed product, injury, and death. Inflatable kiddie-pools can be squished down so that youngsters may crawl in unattended and find themselves in a dangerous situation. It is imperative that parents and guardians are aware of the risks of these items and guard against them.

On May 26, 2011, eight manufacturers recalled pool and in-ground spa drain covers due to incorrect ratings.⁷ The recalled drain covers were incorrectly rated to handle the flow of water through the cover,

which could pose a possible entrapment hazard to swimmers and bathers. The recall involves pool and spa drain covers that can be identified by the manufacturer’s name and model information listed at [this CPSC link](#).



Safety Measures and Recommendations

Children more often experience injury or death from a pool or spa at home than at a public location. This informs the safety measures we might take in order to protect our young ones. CPSC provides precautions we might take.⁸ First, be present, alert, and watchful of your children as they swim. Never leave a child unattended and have a telephone close by in case of emergency. Learn how to conduct CPR and be sure both you and your child know water safety

and how to swim. Prepare the pool area: always fence and lock your pool in so that unattended children are unable to access the pool. In a group assign one or more adults to watch swimmers, trading off often to maintain focus and attentiveness.

Take the [Pool Safety Pledge](#) today and make you and your child safer. For more safety tips, the [Infant Swimming Resource](#) has provided additional details for pools, spas, bathtubs, beaches, and natural bodies of water.

Percent of Emergency Department-Treated Pool or Spa Submersion Injuries
Children Younger than 5 and 15 Years of Age by Location, 2010–2012

Location	Estimated Emergency Department-Treated Injury Percentages ⁸		
	Younger than 5 Years	5–14 Years	Total (Younger than 15 Years)
Residential	53	32	48
Undisclosed Location	29	28	29
Public	19	40	24

Source: U. S. Consumer Product Safety Commission: National Electronic Injury Surveillance System (NEISS). Appendix A details the methodology for data extraction.

Trampolines and Bounce Houses

Injury Statistics

Trampolines	2012	2011	2010	2009	2008
Ages 0-4	16,175	15,205	17,074	14,891	16,512
Ages 5-14	62,569	52,767	58,412	65,188	68,858

**Estimated injury statistics provided by NEISS*

Trampolines and Bounce Houses are a source of great wonder and enjoyment for children as they get to experience gravity in new and unfamiliar ways. However, trampolines have their own dangers that parents and caretakers should be aware of. In 2012, NEISS estimated that 16,175 children under 4 years old were injured in trampoline accidents.

A recent study featured on CBS reports that 70 in 100,000 American children under 17 suffer injuries due to trampolines, and 5 in 100,000 from bounce houses. Bounces houses alone result in one child being sent to the emergency room every 46 minutes nationally.⁹

In recent news, unsecured bounce houses are at risk of tumbling from their original location. On Saturday May 31, 2013, a bounce house tumbled nearly 300 feet with children trapped

inside. Two similar incidents have been reported, one also in May 2013 and another in 2011. In all three occurrences, the bounce house went airborne with children inside.¹⁰ These accidents suggest the need for greater attention on safety and consumer use of these products.

Product Recalls

On January 30, 2013, Sportspower expanded their trampoline recall to include the Sportspower BouncePro 14' Trampoline. The danger of these trampolines is the surrounding netting, which can break, allowing children to fall through and incur injury.¹¹

In July of 2012, Paline USA recalled the Alex® Model 786X Little Jumpers Trampoline due to a safety hazard. The handlebar on the product can break, causing a fall hazard to young children.¹²

On May 17th, 2012, Aqua-Leisure recalled First Fitness® trampolines with handlebars due to a faulty handlebar. Metal fatigue can cause the handlebar to break away during use, posing a risk of laceration from exposed metal surfaces.



Sportspower BouncePro Trampoline

Safety Measures and Recommendations

Currently, the American Academy of Pediatrics (AAP) stance is that trampolines should never be used at home or outdoor playgrounds due to their high risk of injury. Instead, they recommend that trampoline use should be limited to indoor supervised training programs such as gymnastics or diving classes.¹³

If parents choose to have a home trampoline, the Mayo Clinic advises a few precautions to make their use safer. First, the trampoline should be set up on level ground, and always used with a safety net and padded springs. In addition, they recommend parents limit trampoline activity to supervised occasions.¹⁴

Bounce houses, similarly, should be set up and operated by experienced individuals or technicians. It is imperative that weather conditions be considered, in particular wind speeds. Bounce houses should not be used in windy conditions. It is recommended that bounce house activity is limited to one child at a time, with adult supervision.

Playground equipment

Injury Statistics

Playground Equipment	2012	2011	2010	2009	2008
Ages 0-4	70,735	64,210	64,965	62,968	60,559
Ages 5-14	175,589	159,760	161,696	154,894	149,436

*Estimated injury statistics provided by NEISS

Backyard and public playgrounds are a popular spring, summer, and fall afternoon retreat for families across the country. These structures, however, account for hundreds of thousands of injuries every year. NEISS reports an estimated 70,735 playground injuries for children ages 0-4 alone in 2012.¹⁵ The CDC states that over 200,000 children under 14 are seen annually for playground related injuries.

Climbing structures on public playgrounds account for a majority of the injuries. For at home play structures, swings are the culprit. The CDC reported between 1990 and 2000, 147 children ages 14 and younger died from playground-related injuries. Of those deaths, 82 (56%) died from strangulation and 31 (20%) died from falling to the playground surface. Disturbingly, most of these deaths (70%) occurred on home playgrounds.¹⁶

Product Recalls

In December of 2013, Solowave recalled home playground tube slides due to laceration hazard. The plastic windows in the Tornado-brand slide can break, and then pose a risk of injury to users. Consumers should stop using the recalled slide immediately and contact Solowave to receive a free repair kit for the porthole windows.¹⁷

Also in December 2013, Landscape Structures recalled a product called Oodle Swings. The risk these swings pose is if hung too low, children can get their legs caught underneath the swing seat and become injured. Nine children have broken their legs or suffered sprains when their legs got caught.

Since these swings were exclusively sold to schools and other facilities with playgrounds, Landscape Structures has been contacting customers directly to come repair the swing height. If the distance between the bottom of the swing and the ground is less than 12 ¾ inches, immediately stop use of the swing and contact the establishment manager.¹⁸



Safety Measures and Recommendations

Despite the risk factors playgrounds pose, they are a great place for children to learn to take safe risks. The playground should be maintained for function and safety, and be well cushioned by woodchips, mulch, sand, pea gravel, or mats. Monitor young children when they engage with new play structures. Be cautious of hot surfaces in the summer heat.

Movable Soccer Goals

We all know that in soccer, like in any other sport, children risk the occasional scrape or ankle sprain. A much greater risk, however, is entirely preventable. Unsecured, movable soccer goals often fall on unsuspecting children causing serious injury or death.

Injury Statistics

Since 1979, approximately 38 people across the country have died as a result of unsafe soccer goals. Dozens more – approximately 58 - have suffered serious injury due to blunt trauma from falling goals. The vast majority of these injuries occur when someone or something topples an unsecured goal onto a child. Details regarding injuries and deaths can be found at [Anchored for Safety](#).

Product Recall

In September of 2008, Regent sports recalled its soccer goal nets following the strangulation death of a child. The specific products are the MacGregor Folding Soccer Goal and the Mitre Folding Soccer Goal. The hazard is the fixed knot flexible openings in the soccer goal can pose a head and neck entrapment or strangulation hazard to young children

Safety Measures and Recommendations

Safety tips include the following:

- When not in use, anchor or chain one goal to another, to itself in a folded down position, or to nearby fence posts, dugouts, or any other similar sturdy fixture.
- Remove nets when goals are not in use.
- Check for structural integrity and proper connecting hardware before every use. Replace if necessary.
- Never allow anyone to climb on the net or goal framework.
- Ensure safety/warning labels are clearly visible.
- Fully disassemble goals for seasonal storage
- Always exercise extreme caution when moving goals and allow adequate manpower to move goals of varied sizes and weights.
- Movable soccer goals should only be used on level (flat) fields.

The 4th of July

Independence Day is a day of celebration nationwide; families get together, people barbeque, swimming pools are full, and, of course, fireworks are used. Understanding a few precautions can make us all safer on this holiday. First we must understand the different risks we see on the Fourth.

Product	Ages	2012	2011	2010	2009	2008
Holiday, Party supplies	0-4	3,645	3,626	3,594	3,192	3,252
	5-14	1,466	710	1,240	1,347	1,109
BBQ grills, stoves, equipment	0-4	3,024	3,426	3,766	3,162	2,863
	5-14	2,107	2,492	2,201	1,613	1,820

Injury Statistics

*Estimated injury statistics for children ages 5-14, provided by NEISS

- *Swimming revisited.* CPSC reports, “The July 4th holiday has traditionally seen an increase in the number of pool and spa drowning compared to an average week over the rest of the summer. According to data compiled from media reports by USA Swimming, during the last three years over the week of July 4th an average of 26 children drowned in pools and spas.”¹⁹
- *Fireworks.* In 2011, fireworks caused 17,800 reported fires resulting in an estimated 8 deaths, 40 injuries, and \$32 million in property damage. More fires are reported on Independence Day than any other day in America, 2/5 accounted for by fireworks. In that same year, 9,600 people were treated in emergency departments for firework related injuries. The risk of fireworks injury was highest for children 5-19.²⁰
- *Holiday & Party Supplies.* NEISS estimates that there were 3,645 injuries to 0-4 year olds due to holiday and party supplies.
- *BBQ Grills & Stoves.* NEISS estimates 3,024 injuries to 0-4 year olds due to barbeque grills, stoves, and related equipment in 2012.

Product Recalls

On August 15, 2013, Char-Broil recalled their Char-Boil® Gas and Patio Bistro Grills. The recall was due to a faulty mechanism. The electronic ignition on the grill can ignite unexpectedly, posing a burn hazard.²¹

On April 18th, 2012, One World Technologies recalled their STOK Gas Grills. The recall was due to fire and burn hazards. The regulator on the grill can leak propane gas, which can ignite, posing fire and burn hazards to consumers.²²

In June 2010, Big Fireworks recalled their product called the Super Lightning Rocket Firework. The rockets were overloaded with pyrotechnic composition, violating the federal regulatory standard for this product. This could result in a greater than expected explosion, posing a risk of burns and bodily harm to consumers.



Safety Measures and Recommendations

If using fireworks this holiday, please do so with caution. CPSC outlines safety tips to keep in mind when using fireworks.²³

- Never allow young children to play with or ignite fireworks
- Always have adult supervision with fireworks activities
- Never point or throw fireworks at another person
- Keep a bucket of water or garden hose handy
- Never carry fireworks in a pocket
- Douse burnt fireworks with water to prevent trash fires

Additional Summer Safety Recommendations

Grills:

- Never bring charcoal grills indoors. Burning charcoal produces deadly carbon monoxide.
- When cooking outdoor with a gas grill, check the air tubes that lead into the burner for any blockage, cracking, or leakage. If you detect a leak, immediately turn off the gas at the tank and don't attempt to light the grill until the leak is fixed.

Windows:

- Install window guards to prevent children from falling out of open windows. Guards should be installed in children's bedrooms, parents' bedrooms, and other rooms where young children spend time. Or, install window stops that permit windows to open no more than 4 inches. Whenever possible, open windows from the top – not the bottom. Another tip – keep furniture away from the windows to discourage children from climbing near windows.

Yard Work:

- When mowing, keep small children out of the yard. Turn the mower off if children enter the area. If the lawn slopes, mow across the slope with the walk-behind rotary mower, never up and down. With the riding mower, drive up and down the slope, not across it. Never carry children on a riding mower.

Conclusion: How to have safe summer fun

Summer ... the season of fun and adventure. However, with that fun inevitably comes risk. As parents, understanding and appreciating those associated risks can drastically decrease the chances of injury to your child. Check the [Consumer Product Safety Commission website](#) for updates on product recalls, and consult [NEISS](#) for injury statistics. Always consider the associated risks with any activity and understand the necessary precautions to take.

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