



Mott Poll Report

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Minimize Risks when Celebrating with Sparklers and Fireworks

Many summer celebrations, including the 4th of July, feature fireworks or sparklers. The C.S. Mott Children's Hospital National Poll on Children's Health asked a national sample of parents of children 3-18 about their experiences with sparklers and fireworks.

Family celebrations in the past two years included sparklers, according to 63% of parents of children 6-10 years and 38% of parents of children 3-5 years. When their child uses sparklers, parents say they ensure that their child holds the sparkler away from their face (98%), wears shoes (78%), uses only one sparkler at a time (75%), and stays at least six feet apart from other children (63%). Only half of parents (50%) say they have sand or water nearby to put used sparklers.

Most parents (65%) say their child *always* follows the rules when using sparklers, while 90% rate themselves as *always* being careful about supervising their child when using sparklers. More mothers than fathers believe they are always careful about supervision with sparklers.

Over half of parents (57%) say adults in their family or neighborhood have set off fireworks in the past two years. Nearly all (96%) set off ground fireworks such as fountains or spinners, while 79% used aerial fireworks such as roman candles or bottle rockets. Parents say the adults who set off the fireworks lit them one at a time (79%) and allowed them to cool off before picking them up (85%) but only 19% wore safety goggles or other eye protection. Two-thirds (69%) say water was nearby in case of fire.

Among parents who attended family or neighborhood fireworks, 50% say their child sat across the street (30-50 feet) from where aerial fireworks were set off; only 19% say their child sat at least 100 feet away. Most parents (87%) say they talk with their child about safety rules for watching fireworks.

Parents differ on the age at which they would allow their own child to help set off fireworks, with 19% of parents saying age 10 or younger, 34% age 11-15, and 26% age 16-18; 21% say they would never allow their child to set off fireworks. Over one-third of parents (37%) recall that children or teens helped set off family or neighborhood fireworks in the past two years.

Safety with sparklers

Percent of parents who enforce the following rules for their children age 3-10

Hold sparkler away from face

98%

Wear shoes when using sparklers

78%

Only use one sparkler at a time

75%

Stay six feet apart from others

63%

Source: C.S. Mott Children's Hospital
National Poll on Children's Health, 2022

Report Highlights

2 in 3 parents say their child always follows the rules when using sparklers.

1 in 5 parents would allow their child age 10 or younger to help set off fireworks.

Only 1 in 5 parents said children sat at least 100 feet away from where aerial fireworks were being set off.

Data Source & Methods

This report presents findings from a nationally representative household survey conducted exclusively by Ipsos Public Affairs, LLC (Ipsos) for C.S. Mott Children's Hospital. The survey was administered in April 2022 to a randomly selected, stratified group of adults who were parents of at least one child age 3-18 years living in their household (n=2,002). Adults were selected from Ipsos's web-enabled KnowledgePanel® that closely resembles the U.S. population. The sample was subsequently weighted to reflect population figures from the Census Bureau. The survey completion rate was 59% among panel members contacted to participate. The margin of error for results presented in this report is ±1 to 5 percentage points.

A publication from C.S. Mott Children's Hospital, the University of Michigan Department of Pediatrics, and the University of Michigan Susan B. Meister Child Health Evaluation and Research (CHEAR) Center.

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C.S. Mott Children's Hospital National Poll on Children's Health

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Implications

Sparklers and fireworks are a summer tradition for many families. However, they have an element of amazement and danger, and each year, thousands of children end up in the emergency room with injuries due to sparklers and fireworks. To keep children safe, parents need to establish a safe environment that minimizes the risks while still allowing children to have fun.

Parents may believe that sparklers are a safe way for younger children to enjoy summer celebrations. But safety with sparklers depends heavily on parents enforcing safety rules. This Mott Poll suggests that some parents need to be more diligent in maintaining a safe environment for using sparklers.

Sparklers burn at over 1000 degrees, so the key to safety is to prevent burns. Parents should make sure children know how to hold the sparkler below the point where it will burn down. Some parents use common household items such as disposable cups to make a barrier to protect their child's hands. Parents should have a bucket of water and teach children to put the sparkler in the water as soon as it starts to burn down. Sparklers are often used when it is getting dark, which poses additional risks. Parents should check the area for rocks, toys or other objects to prevent children from tripping, and have children wear shoes to prevent burns in the event they accidentally step on a used sparkler.

Children should hold the sparkler at arm's length away from their own eyes, hair and clothing. Much of the fun of sparklers is twirling or waving them around, which can make it a challenge for parents to ensure there is enough distance between children.

In deciding whether to celebrate with sparklers, parents need to consider their child's age and maturity level, including their ability and willingness to follow rules. Parents who are hesitant about these areas may consider a safer alternative, such as LED sparklers with no flame.

Parental decisions about fireworks can be more complicated, as there are many different types. Health experts like the American Academy of Pediatrics recommend that children enjoy professional fireworks, such as at a community celebration. If parents choose to allow their child to attend neighborhood fireworks displays, it is essential that they stay at least 100 feet away from where the fireworks are set off. Parents should also make plans to keep the family pet away from the area.

If parents set off fireworks themselves, and especially if they involve older children or teens, they should prioritize safety. This includes purchasing legal fireworks that are clearly labeled and following the directions carefully, including information on space requirements. Parents should plan ahead to ensure that the space where they will set off the fireworks is large enough, particularly if they will have aerial fireworks. The space should also be far from trees, homes, and fire hazards (e.g., dry grass).

Findings from this Mott Poll point to areas for improvement in fireworks safety. Wearing safety goggles or other eye protection should be standard practice for anyone who sets off fireworks. Another important safety practice is having water nearby in case the fireworks start a fire. Those setting off fireworks should also remember to light one at a time and not try to relight the duds. Fireworks need time to cool, so parents may choose to wait until the next morning to pick up the used fireworks.

Finally, if children are using sparklers or watching fireworks, parents should be ready to give first aid. For a minor burn, parents should put cool water over the burned area for a few minutes, then cover with a clean bandage. If the burn involves the child's eye or if parents suspect the burn is more serious, parents should take the child to the emergency room immediately.