

FIREWORKS AND EYE SAFETY

By Jonna Jefferis



Fireworks are involved in nearly 10,000 injuries treated in emergency rooms each year. More than 20% of the fireworks injuries involve the eyes.

When we think of summer, we often think of outdoor activities and good times with family and friends. Each year we get together for barbecues, family reunions, games and Fourth of July celebrations. An integral part of this holiday is fireworks, which are exciting and spectacular to watch as colors explode across the night sky. Children of every age stand in awe of the fabulous displays, but with explosives comes the potential risk for injury.

In 2007, fireworks were involved in nearly 10,000 injuries treated in hospital emergency rooms^{/1} Of these injuries, 1,400 involved the eyes, and one-third of eye injuries resulted in permanent eye damage^{/2,3}

The majority of all fireworks-related injuries are from firecrackers, bottle rockets and sparklers.^{/4} Seemingly harmless, sparklers pose the greatest threat to small children because parents view them as non-explosive and relatively safe. However, did you know sparklers spew arcs of light at temperatures that can reach 1,800 degrees Fahrenheit – hot enough to melt gold?^{/5} Sparklers account for the greatest number of fireworks injuries overall, and for one-third of all fireworks injuries to children under the age of five.^{/6,7}

Rockets are one of the most dangerous types of fireworks, as they fly erratically and frequently injure bystanders; the bottle or cans used to launch them often explode and can shower fragments of glass or metal in all directions.

So before lighting that match, look at the following statistics:

- Nearly 10,000 injuries from fireworks occur each year.^{/8}
- One-third of eye injuries result in permanent eye damage.^{/9}
- The greatest number of eye injuries are associated with firecrackers, rockets and sparklers.^{/10}
- Sparklers account for one-third of all fireworks injuries to children under age 5^{/11}

If fireworks are legal where you live and someone has plans to set them off, be sure these important safety tips are followed:

- Never allow children to play with or ignite fireworks.
- Be sure that other people are out of range before lighting fireworks.
- Light fireworks only on a smooth, flat surface away from the house, dry leaves and flammable materials
- Never try to relight fireworks that have not fully functioned.
- Keep a bucket of water nearby in case of a malfunction or fire.

If a firework eye injury should occur, do not rub the eye. Shield the eye from pressure or rubbing action. Do not try to rinse out the eye or apply ointment or medication to the eye. Seek medical attention immediately.

Please have a safe and enjoyable summer and happy Fourth of July!

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Nothing in this article is intended, nor should it be construed, as professional advice. Those reviewing the information should consult with a qualified professional.

Sources

^{1/}"Illegal and Improper Use of Fireworks Continue to Harm Consumers," U.S. Consumer Product Safety Commission Web site, June 2008 (Dec. 2008). <http://www.cpsc.gov/CPSCPUB/PREREL/prhtm08/08308.html>

^{2/}"Illegal and Improper."

^{3/}"Eye Trauma from Fireworks," Richmond (VA) Eye Associates Web site (Source: Prevent Blindness America), April 2008 (Dec. 2008). <http://www.richmondeye.com/fireworks.asp>

^{4/}Michael A. Greene and James Joholske, "2007 Fireworks Annual Report: Fireworks-Related Deaths, Emergency Department-Treated Injuries and Enforcement Activities During 2007," U.S. Consumer Product Safety Commission Web site, June 2008 (Dec. 2008). <http://www.cpsc.gov/library/2007/fwreport/pdf>

^{5/}"Fireworks Eye Injury Safety Quiz," Prevent Blindness America Web site, 2007 (Dec. 2008). <http://pbaintranet.org/LinkClick.aspx?fileticket=fjxr27d2LeA%3D&tabid=82&mid=612>

^{6/} Green and Joholske.

^{7/}"National Fireworks Group Urges Caution with Sparklers," National Council on Fireworks Safety Web site, June 2008 (Dec. 2008). http://www.fireworksafety.com/news_releases/national_fireworks_group_ur.pdf

^{8/}"Illegal and Improper."

^{9/}"Eye Trauma."

^{10/}Green and Joholske.

^{11/}"National Fireworks Group."

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