



## ICO Endorses Global Ban of Consumer Fireworks

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### Goal

Encourage ophthalmologists and National Societies of Ophthalmology to advocate for a ban on consumer fireworks by their national governments, as a strategy to prevent unnecessary blindness and visual impairment from firework-related injuries.

### Position

Consumer fireworks are widespread and available in many countries. Unfortunately, in countries where consumer fireworks are not banned, eye injuries related to the use of consumer fireworks, especially during holidays and festival seasons, continue to occur in unacceptable numbers. Even strict regulations on the purchase and use of fireworks do not prevent the high incidence of related eye injuries and the resulting visual impairment and blindness in some patients. The ICO endorses a global ban on consumer fireworks and encourages ICO member societies to advocate for legislation to ban consumer fireworks in their countries.

### Background

Eye injuries related to the consumer use of fireworks is a global problem, with the exception of countries, like Australia, where consumer fireworks have been banned. Ocular fireworks injuries affect both those who handle fireworks and nearby spectators of all ages. One half to nearly two thirds of those affected are children, and one third of eye injuries result in permanent blindness.<sup>1,2</sup> The United States (US) Consumer Product Safety Commission reported that there were 10,500 injuries related to fireworks treated in US hospital emergency departments in 2014, 19% of which were eye injuries.<sup>3</sup> In the US, two-thirds of hospital emergency department-treated firework injuries occur during the summer holiday season, a global trend that has been reported by other countries during their festival seasons.<sup>4,5,6,7,8</sup> A systematic review found that 1 in 6 eye injuries related to fireworks results in severe vision loss.<sup>9</sup> In India, 1 out of 12 children presenting with ocular fireworks injuries in emergency departments had resulting unilateral blindness.<sup>2</sup> However, a German study reported that major eye trauma due to fireworks was more frequently found in male and older patients, including bystanders.<sup>10</sup> In South India, 71% of those injured by firecracker were bystanders.<sup>2</sup>

Countries with restrictive firework legislation show 87% less eye trauma.<sup>9</sup> In Minnesota, where a ban on fireworks has been lifted, a 100% increase in the number of annual fireworks-related injuries was reported.<sup>11</sup>

National societies of ophthalmology throughout the world have begun to speak out against the dire consequences of accidents involving the consumer use of fireworks. Both the Netherlands Society of Ophthalmology and the American Academy of Ophthalmology (AAO) advocate for stronger and stricter legislation on the personal use of fireworks.<sup>7,10,12</sup> Both societies recommend that people should always wear protective eyewear, when handling and/or watching fireworks. The AAO has also issued a statement recommending that people should attend a professional display of fireworks rather than using fireworks at home and urges people to never allow young children to handle fireworks, including sparklers.<sup>12</sup>

The ICO recognizes the important role national societies of ophthalmology can play in a national campaign to ban consumer fireworks and encourages national societies to advocate for such a ban in their respective countries, as a strategy to prevent blindness and visual impairment.

## **Conclusion**

Fireworks are a universal form of entertainment during holiday and festival seasons. Unfortunately, every year, thousands of people across the globe suffer from ocular fireworks injuries. Hundreds of cases of blindness and severe vision loss caused by fireworks could be avoided, if stronger and stricter legislation were in place by national governments. The ICO endorses a global ban of consumer fireworks and encourages national societies of ophthalmology to advocate for a national ban of consumer fireworks in their respective countries, as a strategy to prevent blindness and visual impairment.

Adopted, ICO Officers, 7 May 2016

Endorsed, Board of Trustees, International Agency for the Prevention of Blindness (IAPB), 11 May 2016.

Endorsed, International Pediatric Ophthalmology and Strabismus Council (IPOSOC), 1 July 2016.



## References

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